

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION III 2443 WARRENVILLE ROAD, SUITE 210 LISLE, IL 60532-4352

May 11, 2012

Mr. Larry Meyer Site Vice President NextEra Energy Point Beach, LLC 6610 Nuclear Road Two Rivers, WI 54241

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 – NRC INTEGRATED INSPECTION REPORT 05000266/2012002 AND 05000301/2012002

Dear Mr. Meyer:

On March 31, 2012, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Point Beach Nuclear Plant, Units 1 and 2. The enclosed inspection report documents the inspection results which were discussed on April 3, 2012, with you and members of your staff.

The inspections examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Three NRC-identified findings and one self-revealed finding of very low safety significance (Green) were identified during this inspection.

These findings were determined to involve violations of NRC requirements. The NRC is treating these violations as non-cited violations (NCVs), consistent with Section 2.3.2 of the Enforcement Policy.

If you contest these non-cited violations, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Point Beach Nuclear Plant.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region III; and the NRC Resident Inspector at the Point Beach Nuclear Plant.

L. Meyer

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <u>http://www.nrc.gov/reading-rm/adams.html</u> (the Public Electronic Reading Room).

Sincerely,

/RA/

Michael A. Kunowski, Branch Chief Branch 5 Division of Reactor Projects

Docket Nos. 05000266; 05000301 License Nos. DPR-24; DPR-27

- Enclosure: Inspection Report 05000266/2012002 and 05000301/2012002 w/Attachment: Supplemental Information
- cc w/ encl: Distribution via ListServ

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: License Nos:	05000266; 05000301 DPR-24; DPR-27
Report No:	05000266/2012002; 05000301/2012002
Licensee:	NextEra Energy Point Beach, LLC
Facility:	Point Beach Nuclear Plant, Units 1 and 2
Location:	Two Rivers, WI
Dates:	January 1, 2012, through March 31, 2012
Inspectors:	S. Burton, Senior Resident Inspector M. Thorpe-Kavanaugh, Resident Inspector J. Jandovitz, Project Engineer M. Phalen, Senior Health Physicist V. Myers, Health Physicist K. Barclay, Resident Inspector
Approved by:	Michael A. Kunowski, Branch Chief Branch 5 Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000266/2012002, 05000301/2012002; 01/01/2012 – 03/31/2012; Point Beach Nuclear Plant, Units 1 & 2; Post-Maintenance Testing; Surveillance Testing; Occupational Dose Assessment; and, Identification and Resolution of Problems.

This report covers a 3-month period of inspection by resident inspectors and announced baseline inspections by regional inspectors. Four Green findings were identified by the inspectors. The findings were considered non-cited violations (NCVs) of NRC regulations. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealed Findings

Cornerstone: Mitigating Systems

<u>Green</u>. The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because the licensee failed to follow work orders to properly configure and perform post-maintenance testing (PMT) of the main feedwater regulating valve (MFRV) limit switches. As a result, the limit switches that provide an input into the anticipated transient without scram mitigation system actuation circuitry (AMSAC) were not tested. Specifically, on June 10, 2011, when engineering change EC-12054 for the MFRVs was partially turned over to and accepted by operations for Mode 2 and AMSAC was required to be functioning, the licensee failed to perform a PMT as required by plant procedures. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because, if left uncorrected, the failure to perform PMT could lead to a more significant safety concern. Specifically, the failure to perform PMT of safetyor risk-related components prior to the operational condition for which the equipment was required could result in a latent failure that would only be discovered during a valid demand. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee did not appropriately coordinate work activities by incorporating action to address the impact of changes to the activity on the plant and human performance (H.3(b)). (Section 1R19)

<u>Green</u>. The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to perform an operability evaluation of the impact of door deficiencies on their ability to function as a high-energy line break (HELB) barrier, fire (safe shutdown) door, and flood barrier. Specifically, the inspectors identified condition reports written between December 13, 2011, and March 8, 2012, for degraded doors credited as HELB barriers, safe shutdown doors, and flood barriers; however, the licensee failed to perform an operability evaluation of the conditions as

required by plant procedures. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because, if left uncorrected, the failure to perform operability evaluations and recognize conditions that could render equipment inoperable could lead to a more significant safety concern. The finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action, because the licensee failed to take appropriate action to address safety issues and adverse trends in a timely manner. Although the licensee had previously recognized this and initiated training to correct the knowledge based aspects of the issue, there were no interim barriers in place during the long duration needed to complete the training activity (P.1(d)). (Section 4OA2.3(1))

Cornerstone: Barrier Integrity

 <u>Green</u>. A finding of very low safety significance and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," were self-revealed during the preparation for surveillance testing when the licensee failed to implement existing procedural guidance for the control of clearances between installed scaffolding and plant equipment. Specifically, scaffolding was constructed too close to the Unit 2 containment spray suction isolation valve from the residual heat removal (RHR) heat exchanger interfering with the operation of the valve. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because the finding was associated with the Barrier Integrity Cornerstone attribute of structures, systems, and components, and barrier performance, and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers, specifically the containment, would be able to protect the public from radionuclide releases caused by accidents or events. The finding has a cross-cutting aspect in the area of problem identification and resolution, trending, because the licensee did not assess information from the corrective action program in the aggregate to identify programmatic and common cause problems. Specifically, the licensee had identified similar issues of sufficient importance and quantity that if trended, had the potential to preclude the event (P.1(b)). (Section 1R22)

Cornerstone: Occupational Radiation Safety

<u>Green</u>. The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 20.1201(c). Specifically, the licensee failed to accurately assess and assign the appropriate individual dose received on multiple (three) occasions in the first quarter 2010, given thermoluminescent dosimeter (TLD) to electronic dosimeter (ED) data mismatches. The issue was entered in the licensee's corrective action program as AR01730419. The licensee's immediate corrective actions included assigning the appropriate exposures to the involved individuals.

The finding was determined to be more than minor in accordance with IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," because it was associated with the program and process attribute of the Occupational Radiation Safety Cornerstone, and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that not assigning an individual the appropriate dose received affected the licensee's ability to monitor, control, and limit radiation exposures. Specifically, the inspectors determined that the finding had very low safety significance (Green) because the finding did not involve: (1) as-low-as-is-reasonably-achievable (ALARA) planning and controls; (2) a radiological overexposure; (3) there was not a substantial potential for an overexposure; and (4) there was no compromised ability to assess dose. This finding has a cross-cutting aspect in the area of human performance, work practices, specifically, that the licensee ensures the use of human error prevention techniques (H.4(a)). (Section 2RS4)

B. <u>Licensee-Identified Violations</u>

No violations were identified.

REPORT DETAILS

Summary of Plant Status

Unit 1 and Unit 2 operated at 100 percent power throughout the entire inspection period with the exception of brief downpowers to conduct planned maintenance and surveillance activities.

1. **REACTOR SAFETY**

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, and Emergency Preparedness

- 1R01 Adverse Weather Protection (71111.01)
 - .1 External Flooding
 - a. Inspection Scope

The inspectors evaluated the design, material condition, and procedures for coping with the design basis probable maximum flood. The evaluation included a review to check for deviations from the descriptions provided in the Final Safety Analysis Report (FSAR) for features intended to mitigate the potential for flooding from external factors. As part of this evaluation, the inspectors checked for obstructions that could prevent draining, and determined that barriers required to mitigate the flood were in place and operable. Additionally, the inspectors performed a walkdown of the protected area to identify any modification to the site which would inhibit site drainage during a probable maximum precipitation event or allow water ingress past a barrier. The inspectors also walked down underground bunkers/manholes subject to flooding that contained multiple train or multiple function risk-significant cables. The inspectors also reviewed the applicable procedures for mitigating the design basis flood to ensure it could be implemented as written. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one external flooding sample as defined in Inspection Procedure (IP) 71111.01-05.

b. Findings

<u>Introduction</u>: An unresolved item (URI) was identified by the inspectors to determine if a performance deficiency existed regarding the licensee's external flooding design features and mitigating strategies. Specifically, the FSAR described several design features and mitigation strategies for which the licensee needed to provide additional information to support that the features/strategies were appropriately designed, tested, maintained, and procedurally controlled for event response.

<u>Description</u>: While reviewing the licensing basis information for flooding, the inspectors found that the FSAR described design features to mitigate external flooding. Specifically, the FSAR described a postulated flood occurring through simultaneous melting of a large amount of snow in spring combined with sustained heavy rains. The FSAR states that the combined amount of water for both would be an approximately 1,400 acre-feet area which would be dissipated by natural drainage of the site, a storm sewer system, and an interceptor ditch. The inspectors questioned the licensee regarding the absence of procedures to determine how design features described were

Enclosure

maintained and controlled. Additionally, the inspectors reviewed the licensee's abnormal operating procedure AOP-13C, "Severe Weather Conditions," and found that, while one of the entry conditions was notification or validation of flood watch or warning, the procedure did not address, or direct personnel to take, actions as for the external flooding conditions described in the FSAR. The inspectors are awaiting additional information from the licensee regarding whether the statements in the FSAR were correct and/or if procedures existed.

Additionally, the FSAR describes a postulated flood occurring when waves from Lake Michigan break over the bank surrounding the circulating water/service water pumphouse. The FSAR indicated that if the storm sewer system was not adequate enough to drain the water, it could seep into the adjacent turbine building through doors and affect the continued operation of essential equipment such as the EDGs or the risk significant instrument air compressors. Therefore, the site would protect the turbine building and pumphouse by using sandbags, concrete jersey barriers, or equivalent barriers. The inspectors found that the licensee had both concrete barriers and sandbags available for protecting from these phenomena, but based on a review of procedure PC 80 Part 7, "Lake Water Level Determination," guidance was only provided for installation of concrete jersey barriers. The inspectors found to external flooding condition described in the FSAR for the raising lake level or the use of sandbags. At the close of this inspection period, the inspectors were awaiting additional information from the licensee with respect to alternate procedures or protective measures.

The inspectors opened this URI to determine whether a performance deficiency existed regarding the licensee's external flooding design features and mitigating strategies as described in the FSAR. Specifically, the FSAR describe several design features and mitigation strategies for which the licensee needed to provide additional information to support that the features/strategies were appropriately designed, tested, maintained, and procedurally controlled for event response (URI 05000266/2012002-01; 05000301/2012002-01, External Flooding Design and Mitigation Strategies Maintained and Tested Appropriately).

- 1R04 Equipment Alignment (71111.04)
 - .1 Quarterly Partial System Walkdowns
 - a. Inspection Scope

The inspectors performed partial system walkdowns of the following risk-significant systems:

- partial service water (SW) system alignment after maintenance (Units 1 and 2); and
- partial emergency diesel generator (EDG) G-03 alignment after surveillance testing (Unit 1).

The inspectors selected these systems based on their risk significance relative to the Reactor Safety Cornerstones at the time they were inspected. The inspectors attempted to identify any discrepancies that could impact the function of the system and, therefore, potentially increase risk. The inspectors reviewed applicable operating procedures,

system diagrams, FSAR, Technical Specification (TS) requirements, outstanding work orders (WOs), condition reports (CRs), and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have rendered the systems incapable of performing their intended functions. The inspectors also walked down accessible portions of the systems to verify system components and support equipment were aligned correctly and operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no obvious deficiencies. The inspectors also verified that the licensee had properly identified and resolved equipment alignment problems that could cause initiating events or impact the capability of mitigating systems or barriers and entered them into the corrective action program (CAP) with the appropriate significance characterization. Documents reviewed are listed in the Attachment to this report.

These activities constituted two partial system walkdown samples as defined in IP 71111.04-05.

b. Findings

No findings were identified.

.2 <u>Semi-Annual Complete System Walkdown</u>

a. Inspection Scope

On February 21, 2012, the inspectors performed a complete system alignment inspection of the component cooling water (CCW) system to verify the functional capability of the system. This system was selected because it was considered both safety significant and risk significant in the licensee's probabilistic risk assessment. The inspectors walked down the system to review mechanical and electrical equipment lineups, electrical power availability, system pressure and temperature indications, as appropriate, component labeling, component lubrication, component and equipment cooling, hangers and supports, operability of support systems, and to ensure that ancillary equipment or debris did not interfere with equipment operation. A review of a sample of past and outstanding WOs was performed to determine whether any deficiencies significantly affected the system function. In addition, the inspectors reviewed the CAP to ensure that system equipment alignment problems were being identified and appropriately resolved. Documents reviewed are listed in the Attachment to this report.

These activities constituted one complete system walkdown sample as defined in IP 71111.04-05.

b. Findings

No findings were identified.

1R05 <u>Fire Protection</u> (71111.05)

.1 <u>Routine Resident Inspector Tours</u> (71111.05Q)

a. Inspection Scope

The inspectors conducted fire protection (FP) walkdowns which were focused on availability, accessibility, and the condition of firefighting equipment in the following risk-significant plant areas:

- fire zone A47 (central alarm station);
- fire zone 142 (CCW pump room);
- fire zone 770 (G-03); and
- fire zone 773 (G-03) (switchgear room).

The inspectors reviewed areas to assess if the licensee had implemented an FP program that adequately controlled combustibles and ignition sources within the plant, effectively maintained fire detection and suppression capability, maintained passive FP features in good material condition, and implemented adequate compensatory measures for out-of-service, degraded or inoperable FP equipment, systems, or features in accordance with the licensee's fire plan. The inspectors selected fire areas based on their overall contribution to internal fire risk as documented in the plant's Individual Plant Examination of External Events with later additional insights, their potential to impact equipment which could initiate or mitigate a plant transient, or their impact on the plant's ability to respond to a security event. Using the documents listed in the Attachment to this report, the inspectors verified that fire hoses and extinguishers were in their designated locations and available for immediate use; that fire detectors and sprinklers were unobstructed; that transient material loading was within the analyzed limits; and fire doors, dampers, and penetration seals appeared to be in satisfactory condition. The inspectors also verified that minor issues identified during the inspection were entered into the licensee's CAP. Documents reviewed are listed in the Attachment to this report.

These activities constituted four quarterly fire protection inspection samples as defined in IP 71111.05-05.

b. Findings

No findings were identified.

- .2 <u>Annual Fire Protection Drill Observation</u> (71111.05A)
- a. Inspection Scope

On February 3, 2012, the inspectors observed a fire brigade activation and response to a fire in the cleanside maintenance shop. Based on this observation, the inspectors evaluated the readiness of the plant fire brigade to fight fires. The inspectors verified that the licensee staff identified deficiencies, openly discussed them in a self-critical manner at the drill debrief, and took appropriate corrective actions. Specific attributes evaluated were:

- proper wearing of turnout gear and self-contained breathing apparatus;
- proper use and layout of fire hoses;
- employment of appropriate fire fighting techniques;
- sufficient firefighting equipment brought to the scene;
- effectiveness of fire brigade leader communications, command, and control;
- search for victims and propagation of the fire into other plant areas;
- smoke removal operations;
- utilization of pre-planned strategies;
- adherence to the pre-planned drill scenario; and
- drill objectives.

Documents reviewed are listed in the Attachment to this report.

These activities constituted one annual fire protection inspection sample as defined in IP 71111.05-05.

b. Findings

No findings were identified.

- 1R06 Flooding (71111.06)
 - .1 Internal Flooding
 - a. Inspection Scope

The inspectors reviewed selected risk important plant design features and licensee procedures intended to protect the plant and its safety-related (SR) equipment from internal flooding events. The inspectors reviewed flood analyses and design documents, including the FSAR, engineering calculations, and AOPs to identify licensee commitments. Documents reviewed are listed in the Attachment to this report. In addition, the inspectors reviewed licensee drawings to identify areas and equipment that may be affected by internal flooding caused by the failure or misalignment of nearby sources of water, such as the fire suppression or the circulating water systems. The inspectors also reviewed the licensee's corrective action documents with respect to past flood-related items identified in the CAP to verify the adequacy of the corrective actions. The inspectors performed a walkdown of the following plant area to assess the adequacy of watertight doors and verify drains and sumps were clear of debris and were operable, and that the licensee complied with its commitments:

• EDG rooms G-01 and G-02.

This inspection constituted one internal flooding sample as defined in IP 71111.06-05.

b. Findings

No findings were identified.

.2 Underground Vaults

a. Inspection Scope

The inspectors selected underground manholes subject to flooding that contained cables whose failure could disable risk-significant equipment. The inspectors determined that the cables were not submerged, that splices were intact, and that appropriate cable support structures were in place. In those areas where dewatering devices were used, such as a sump pump, the device was operable and level alarm circuits were set appropriately to ensure that the cables would not be submerged. In those areas without dewatering devices, the inspectors verified that drainage of the area was available, or that the cables were qualified for submergence conditions. The inspectors also reviewed the licensee's corrective action documents with respect to past submerged cable issues identified in the CAP to verify the adequacy of the corrective actions. Documents reviewed are listed in the Attachment to this report. The inspectors performed a walkdown of the following underground manholes subject to flooding:

• manhole numbers 1 and 2.

This inspection constituted one underground vaults sample as defined in IP 71111.06-05.

b. Findings

No findings were identified.

1R07 <u>Annual Heat Sink Performance</u> (71111.07)

- .1 Heat Sink Performance
- a. Inspection Scope

The inspectors reviewed the licensee's testing of the Unit 2 containment fan coil unit (CFCU) heat exchangers to verify that potential deficiencies did not mask the licensee's ability to detect degraded performance, to identify any common cause issues that had the potential to increase risk, and to ensure that the licensee was adequately addressing problems that could result in initiating events that would cause an increase in risk. The inspectors reviewed the licensee's observations as compared against acceptance criteria, the correlation of scheduled testing and the frequency of testing, and the impact of instrument inaccuracies on test results. The inspectors also verified that test acceptance criteria considered differences between test conditions, design conditions, and testing conditions. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one annual heat sink performance sample as defined in IP 71111.07-05.

b. Findings

No findings were identified.

1R11 <u>Licensed Operator Requalification Program</u> (71111.11)

.1 <u>Resident Inspector Quarterly Review</u> (71111.11Q)

a. Inspection Scope

On January 12, 2012, the inspectors observed a crew of licensed operators in the plant's simulator during licensed operator requalification examinations to verify that operator performance was adequate, evaluators were identifying and documenting crew performance problems, and training was being conducted in accordance with licensee procedures. The inspectors evaluated the following areas:

- licensed operator performance;
- crew's clarity and formality of communications;
- ability to take timely actions in the conservative direction;
- prioritization, interpretation, and verification of annunciator alarms;
- correct use and implementation of abnormal and emergency procedures;
- control board manipulations;
- oversight and direction from supervisors; and
- ability to identify and implement appropriate TS actions and emergency plan actions and notifications.

The crew's performance in these areas was compared to pre-established operator action expectations and successful critical task completion requirements. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one quarterly licensed operator requalification program sample as defined in IP 71111.11.

b. Findings

No findings were identified.

.2 <u>Resident Inspector Quarterly Observation of Heightened Activity or Risk</u> (71111.11Q)

a. Inspection Scope

On January 6, 2012, the inspectors observed activities in the control room during a power reduction to conduct turbine stop valve testing after turbine upgrades from an extended power uprate (EPU). This was an activity that required heightened awareness or was related to increased risk. The inspectors evaluated the following areas:

- licensed operator performance;
- crew's clarity and formality of communications;
- ability to take timely actions in the conservative direction;
- prioritization, interpretation, and verification of annunciator alarms;
- correct use and implementation of procedures;
- control board manipulations;
- oversight and direction from supervisors; and
- ability to identify and implement appropriate TS actions and emergency plan actions and notifications.

The performance in these areas was compared to pre-established operator action expectations, procedural compliance and task completion requirements. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one quarterly licensed operator heightened activity/risk sample as defined in IP 71111.11.

b. Findings

No findings were identified.

1R12 <u>Maintenance Effectiveness</u> (71111.12)

- .1 <u>Routine Quarterly Evaluations</u> (71111.12Q)
 - a. Inspection Scope

The inspectors evaluated degraded performance issues involving the following risk-significant systems:

- problem-oriented approach for EDG air intake louvers; and
- problem-oriented approach of 4160-volt alternating current (AC) due to breaker maintenance question and EDG G-02 2-year overhaul.

The inspectors reviewed events, such as where ineffective equipment maintenance had resulted in valid or invalid automatic actuations of engineered safeguards systems, and independently verified the licensee's actions to address system performance or condition problems in terms of the following:

- implementing appropriate work practices;
- identifying and addressing common cause failures;
- scoping of systems in accordance with 10 CFR 50.65(b) of the maintenance rule;
- characterizing system reliability issues for performance;
- charging unavailability for performance;
- trending key parameters for condition monitoring;
- ensuring 10 CFR 50.65(a)(1) or (a)(2) classification or re-classification; and
- verifying appropriate performance criteria for structures, systems, and components (SSCs)/functions classified as (a)(2), or appropriate and adequate goals and corrective actions for systems classified as (a)(1).

The inspectors assessed performance issues with respect to the reliability, availability, and condition monitoring of the system. In addition, the inspectors verified maintenance effectiveness issues were entered into the CAP with the appropriate significance characterization. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two quarterly maintenance effectiveness samples as defined in IP 71111.12-05.

b. Findings

No findings were identified.

1R13 <u>Maintenance Risk Assessments and Emergent Work Control</u> (71111.13)

.1 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors reviewed the licensee's evaluation and management of plant risk for the maintenance and emergent work activities affecting risk-significant and SR equipment listed below to verify that the appropriate risk assessments were performed prior to removing equipment for work:

- train A work and testing during protected train A work week of January 30;
- train A work performed during protected train B work week of February 12; and
- risk management of 2X-02 transformer degradation and impact on cables.

These activities were selected based on their potential risk significance relative to the Reactor Safety Cornerstones. As applicable for each activity, the inspectors verified that risk assessments were performed as required by 10 CFR 50.65(a)(4), and were accurate and complete. When emergent work was performed, the inspectors verified that the plant risk was promptly reassessed and managed. The inspectors reviewed the scope of maintenance work, discussed the results of the assessment with the licensee's probabilistic risk analyst or shift technical advisor, and verified plant conditions were consistent with the risk assessment. The inspectors also reviewed TS requirements and walked down portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met. Documents reviewed are listed in the Attachment to this report.

This inspection constituted three maintenance risk assessments and emergent work control activities samples as defined in IP 71111.13-05.

b. Findings

No findings were identified.

1R15 Operability Determinations and Functional Assessments (71111.15)

- .1 Operability Evaluations
 - a. Inspection Scope

The inspectors reviewed the following issues:

- main feedwater (FW) isolation valve air accumulator welds possibly undersized (Unit 2);
- pressurizer safety valve potential leakage path caused by cold spring (Unit 2);
- calculation indicates battery charger testing may be inadequate (Units 1 and 2);
- emergency power cable to technical support center (TSC) may be sized incorrectly; and
- voids identified in Unit 1 emergency core cooling system (ECCS).

The inspectors selected these potential operability issues based on the risk significance of the associated components and systems. The inspectors evaluated the technical adequacy of the evaluations to ensure that TS operability was properly justified and the subject component or system remained available such that no unrecognized increase in risk occurred. The inspectors compared the operability and design criteria in the appropriate sections of the TSs and FSAR to the licensee's evaluations to determine whether the components or systems were operable. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations. Additionally, the inspectors reviewed a sampling of corrective action documents to verify that the licensee was identifying and correcting any deficiencies associated with operability evaluations. Documents reviewed are listed in the Attachment to this report.

This inspection constituted five operability samples as defined in IP 71111.15-05.

b. <u>Findings</u>

No findings were identified.

- 1R18 Plant Modifications (71111.18)
 - .1 Plant Modifications
 - a. Inspection Scope

The inspectors reviewed the following modification:

• safety injection accumulator alternate relief valve IT-34B (temporary).

The inspectors reviewed the configuration changes and associated 10 CFR 50.59 safety evaluation screening against the design basis, FSAR, and TSs, as applicable, to verify that the modification did not affect the operability or availability of the affected system. The inspectors, as applicable, observed ongoing and completed work activities to ensure that the modifications were installed as directed and consistent with the design control documents; the modifications operated as expected; post-modification testing adequately demonstrated continued system operability, availability, and reliability; and that operation of the modifications did not impact the operability of any interfacing systems. As applicable, the inspectors verified that relevant procedure, design, and licensing documents were properly updated. Lastly, the inspectors discussed the plant modification with operations, engineering, and training personnel to ensure that the individuals were aware of how the operation with the plant modification in place could impact overall plant performance. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one temporary modification sample as defined in IP 71111.18-05.

b. Findings

No findings were identified.

1R19 <u>Post-Maintenance Testing</u> (71111.19)

.1 <u>Post-Maintenance Testing</u>

a. Inspection Scope

The inspectors reviewed the following PMT activities to verify that procedures and test activities were adequate to ensure system operability and functional capability:

- PMT of the vital bus synchronization scope/meter after maintenance (Unit 1);
- PMT of SW pump P-32C following switch failure during surveillance test (Units 1 and 2);
- PMT of main feedwater regulating valve (MFRV) limit switches following installation (Unit 2); and
- PMT of EDG G-02 after 2-year overhaul (Unit 2).

These activities were selected based upon the SSCs' ability to impact risk. The inspectors evaluated these activities for the following (as applicable): the effect of testing on the plant had been adequately addressed; testing was adequate for the maintenance performed; acceptance criteria were clear and demonstrated operational readiness; test instrumentation was appropriate; tests were performed as written in accordance with properly reviewed and approved procedures; equipment was returned to its operational status following testing (temporary modifications or jumpers required for test performance were properly removed after test completion); and test documentation was properly evaluated. The inspectors evaluated the activities against TSs, the FSAR, 10 CFR Part 50 requirements, licensee procedures, and various NRC generic communications to ensure that the test results adequately ensured that the equipment met the licensing basis and design requirements. In addition, the inspectors reviewed corrective action documents associated with PMTs to determine whether the licensee was identifying problems and entering them into the CAP, and that the problems were being corrected commensurate with their importance to safety. Documents reviewed are listed in the Attachment to this report.

This inspection constituted four post-maintenance testing samples as defined in IP 71111.19-05.

b. Findings

Failure to Follow Procedure and Implement Post-Maintenance Testing for Main Feedwater Regulating Valves Following EPU Modifications

<u>Introduction</u>: The inspectors identified a finding of very low safety significance (Green) and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because the licensee failed to follow WOs to properly configure and perform PMT of the MFRV limit switches. As a result, the limit switches that provide an input into the anticipated transient without scram mitigation system actuation circuitry (AMSAC) were not tested. Specifically, on June 10, 2011, when engineering change EC-12054 for the MFRVs was partially turned over to and accepted by operations for Mode 2 and AMSAC was required to be functioning, the licensee failed to perform a PMT as required by plant procedures. The licensee entered this issue into its CAP for evaluation and development of corrective actions.

<u>Description</u>: On September 2, 2011, the licensee initiated CR01683509, identifying that portions of EC258482 (EC12054), "Feedwater Regulating Valve Upgrade U2," may not have been fully implemented. Specifically, the CR identified that the electrical logic wiring for the slugging feature for the post-reactor trip response was not implemented. The inspectors reviewed the licensee's corrective actions from the CR and noted these included only a prompt operability on this specific condition related to the MFRVs and not an extent-of-condition regarding the EC itself. The inspectors questioned the licensee regarding whether additional portions of the EC were completed as designed, or if other adverse conditions existed.

In response to the inspectors' inquiry, on September 13, 2011, the licensee generated CR01685732, identifying that the PMT of the MFRV AMSAC limit switches was not performed. Instead, the MFRV AMSAC limit switches were calibrated on March 2, 2011, prior to the installation of the modification. The limit switches were subsequently removed from service to allow for the installation of EC258482. Upon completion of the valve installation of the EC258482, the MFRV AMSAC limit switches were reinstalled and accepted as part of the licensee's partial turnover process when all aspects of the EC were not yet completed. The aspects that were not tested include wiring disturbances from the re-installation activity and the relative position of the switches to the actuation mechanism on the valve to assure actuation occurred appropriately. However, the licensee used the fact that the limit switches were attached to the wiring board with wiring intact and labeling maintained as the basis for functionality of the AMSAC switches.

The licensee plans to perform the PMT at the next available opportunity. The inspectors were concerned about the reliability of AMSAC as required by 10 CFR 50.62 (Requirements for reduction of risk from anticipated transients without a reactor scram) because some aspects of the PMT were not performed. The inspectors considered the lack of a successful PMT unresolved pending successful performance of the test at the first available opportunity, either during a forced or refueling outage (URI 05000301/2012002-02, Post-Maintenance Test On Main Feedwater Regulating Valve AMSAC Switches Deferred To Later Date).

The inspectors reviewed NP 10.2.7, "Post Maintenance/Return to Service Testing," and found that Step 4.1.2 required PMT following any corrective or preventive work activity when the work affects or has the potential to affect plant safety or operation. Further, Step 4.1.6 listed examples of maintenance activities requiring PMT, which included maintenance affecting electrical control circuitry or electronic components, and Step 4.1.8 stated that "PMT should separately test all component functions which may have been affected by maintenance activities." The inspectors concluded that the mechanical reinstallation of the MFRV AMSAC limit switches may have impacted the electrical or mechanical interfaces. As such, modifications were made to the MFRV AMSAC limit switches without some aspects of the PMT completed as described above.

<u>Analysis</u>: The inspectors determined that the failure to perform PMT of the MFRV AMSAC limit switches per NP 10.2.7, as described above, was a performance deficiency warranting further review. Using IMC 0612, Appendix B, "Issue Screening," dated December 24, 2009, the finding was determined to be more than minor because, if left uncorrected, the failure to perform PMT could lead to a more significant safety concern. Specifically, the failure to perform PMT of safety or risk related components prior to the operational condition for which the equipment was required could result in a latent failure that would only be discovered during a valid demand.

The inspectors determined the finding could be evaluated using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Tables 3b and 4a for the Mitigating Systems Cornerstone, dated January 10, 2008. The inspectors answered "No" to all of the questions in the Mitigating Systems column of Table 4a; therefore, the finding screened as very low safety significance (Green).

This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee did not appropriately coordinate work activities by incorporating action to address the impact of changes to the activity on the plant and human performance. Specifically, the licensee's communications between working groups did not occur when ECs were designed in parallel with the implementation of modifications and partial turnover process (H.3(b)).

<u>Enforcement</u>: Title 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," states, in part, that activities affecting quality shall be prescribed and accomplished in accordance with procedures. Contrary to this, on June 10, 2011, when EC12054 for the MFRVs was partially turned over to and accepted by operations for Mode 2 and AMSAC was required to be functioning, the licensee failed to perform PMT as required by NP 10.2.7. Because this violation was of very low safety significance, and it was entered into the licensee's CAP (as CR1751798), this violation is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy (NCV 05000301/2012002-03; Failure to Follow Procedure and Implement Post-Maintenance Testing for Main Feedwater Regulating Valves Following EPU Modifications).

- 1R22 <u>Surveillance Testing</u> (71111.22)
 - .1 <u>Surveillance Testing</u>
 - a. Inspection Scope

The inspectors reviewed the test results for the following activities to determine whether risk-significant systems and equipment were capable of performing their intended safety function and to verify testing was conducted in accordance with applicable procedural and TS requirements:

- main turbine stop and generator valve test (Unit 2) (routine);
- train A ECCS venting and valve surveillance (Unit 2) (routine);
- turbine-driven auxiliary feedwater pump quarterly surveillance test (Unit 1) (routine);
- periodic ultrasonic examination for voids in the ECCS (Unit 1) (routine);
- quarterly SW pump IT-07 testing (Units 1 and 2) (inservice testing (IST));
- quarterly battery surveillance test (routine)
- auxiliary feedwater pump 2P-53 suction header pressure trip (Unit 2) (routine);
- fuel transfer tube flange seal leak test (Unit 1) (containment isolation valve (CIV)); and
- OI 55 primary leak calculation (Unit 1) (reactor coolant system (RCS)).

The inspectors observed in-plant activities and reviewed procedures and associated records to determine the following:

- did preconditioning occur;
- were the effects of the testing adequately addressed by control room personnel or engineers prior to the commencement of the testing;
- were acceptance criteria clearly stated, demonstrated operational readiness, and consistent with the system design basis;
- plant equipment calibration was correct, accurate, and properly documented;
- as-left setpoints were within required ranges; and the calibration frequency was in accordance with TSs, the FSAR, procedures, and applicable commitments;
- measuring and test equipment calibration was current;
- test equipment was used within the required range and accuracy; applicable prerequisites described in the test procedures were satisfied;
- test frequencies met TS requirements to demonstrate operability and reliability; tests were performed in accordance with the test procedures and other applicable procedures; jumpers and lifted leads were controlled and restored where used;
- test data and results were accurate, complete, within limits, and valid;
- test equipment was removed after testing;
- where applicable for IST activities, testing was performed in accordance with the applicable version of American Society of Mechanical Engineers (ASME) code Section XI, and reference values were consistent with the system design basis;
- where applicable, test results not meeting acceptance criteria were addressed with an adequate operability evaluation or the system or component was declared inoperable;
- where applicable for SR instrument control surveillance tests, reference setting data were accurately incorporated in the test procedure;
- where applicable, actual conditions encountering high resistance electrical contacts were such that the intended safety function could still be accomplished;
- prior procedure changes had not provided an opportunity to identify problems encountered during the performance of the surveillance or calibration test;
- equipment was returned to a position or status required to support the performance of its safety functions; and
- all problems identified during the testing were appropriately documented and dispositioned in the CAP.

Documents reviewed are listed in the Attachment to this report.

This inspection constituted six routine surveillance testing samples, one inservice testing sample, one reactor coolant system leak detection inspection sample, and one containment isolation valve sample as defined in IP 71111.22, -02 and -05.

b. Findings

Scaffold Construction Interferes with the Operation of Containment Spray Suction Valve

<u>Introduction</u>: A Green NCV of 10 CFR 50, Appendix B, Criterion V, was self-revealed during the preparation for surveillance testing when the licensee failed to implement existing procedural guidance for the control of clearances between installed scaffolding

and plant equipment. Specifically, scaffolding was constructed too close to the Unit 2 valve that isolates containment spray suction from the residual heat removal (RHR) heat exchanger, interfering with the operation of the valve.

<u>Description</u>: During a review of CRs for the containment spray pump and valve test, the inspectors became concerned about an issue associated with containment spray suction valve from RHR heat exchanger A, 2SI-871A. Specifically, CR01701035 documented a condition where scaffolding constructed over the top of 2SI-871A interfered with the operation of the valve.

The inspectors reviewed the licensee's assessment of the issue and found that the scaffolding had been constructed 53.75 hours prior to the discovery, and that the associated completion time for the related limiting condition for operation (LCO) was 72 hours. The licensee subsequently concluded that the valve remained operable because the valve stem was capable of displacing the interfering scaffolding. The inspectors concluded that it was fortuitous that the portion of the scaffolding erected over the valve was of insufficient size to render the valve inoperable, and that the licensee had scheduled the surveillance test interval such that the procedural error was able to be discovered with the allowed LCO completion time.

The inspectors reviewed the requirements of licensee procedure MI 32.9, "Scaffolding Program." Procedure MI 32.9, Step 2.2.4, required an operations review of scaffolding construction using Attachment B. Attachment B, Step 3.0, required that scaffolding erected that could impede the travel of air- or motor-operated valves be documented and assessed. Additionally, Step 4.16 required a minimum 3-inch working clearance around valves and Step 4.17 required that when a 3-inch clearance could not be obtained, then an engineering evaluation be performed and documented. The inspectors concluded that the procedure had not been followed in all cases above. The licensee's apparent cause evaluation (ACE) attributed this failure to verify and validate procedure requirements, not a failure to follow procedure, as the apparent cause of the issue.

The inspectors reviewed the licensee's ACE and found that the licensee had identified 53 CRs related to scaffolding issues since January 1, 2011. The licensee had selected 25 of the most recent CRs to review in preparing the analysis. Based on the sample sizes and date range selected, the inspectors were unable to ascertain if the ACE had considered training, time pressures, or lack of trending as contributors to the event. The inspectors reviewed the potential for these issues to be contributors to the event and found that all items warranted additional review by the licensee. Additionally, the inspectors found the most significant contributor to be trending The inspectors determined that trending was the most significant contributor due to the large number of pre-existing CRs associated with scaffolding issues; and that on September 19, 2011, AR01687462 identified that scaffolding was built that interfered with the manual operator for Unit 1, main steam isolation valve "A." The inspectors concluded that because of the quantity of pre-existing CRs on the issue, and the fact that AR01687462 resulted from the same missed procedural steps, the licensee had a prior opportunity to trend and prevent the occurrence of this issue.

<u>Analysis</u>: The inspectors determined that the failure to follow the multiple requirements of MI 32.9 was a performance deficiency warranting further review.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because the finding was associated with the Barrier Integrity Cornerstone attribute of SSC and barrier performance, and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers, specifically the containment, would be able to protect the public from radionuclide releases caused by accidents or events.

The inspectors determined the finding could be evaluated using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a for the Barrier Integrity Cornerstone, dated January 10, 2008. The inspectors answered "No" to all of the questions in the Containment Barrier column of Table 4a; therefore, the finding screened as very low safety significance (Green).

This finding has a cross-cutting aspect in the area of problem identification and resolution, trending, because the licensee did not assess information from the CAP in the aggregate to identify programmatic and common cause problems. Specifically, the licensee had issues of sufficient importance substantive and quantity that, if trended, had the potential to preclude the event (P.1(b)).

<u>Enforcement</u>: Title 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," states, in part, that activities affecting quality shall be prescribed and accomplished in accordance with the procedures. Contrary to this, on December 12, 2011, scaffolding was constructed near valve of 2SI-871A that did not meet the clearance requirements established in plant procedure MI 32.9, Steps 4.16 and 4.17, and Attachment B, Step 3.0.

Because this violation was of very low safety significance, and it was entered into the licensee's CAP (as AR01716135), this violation is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy (NCV 05000266/2012002-04; 05000301/2012002-04, Scaffold Construction Interferes with the Operation of Containment Spray Suction Valve).

1EP6 Drill Evaluation (71114.06)

.1 <u>Emergency Preparedness Drill Observation</u>

a. Inspection Scope

The inspectors evaluated the conduct of a routine licensee emergency drill on March 6, 2012, to identify any weaknesses and deficiencies in classification, notification, and protective action recommendation development activities. The inspectors observed emergency response operations in the simulator to determine whether the event classification, notifications, and protective action recommendations were performed in accordance with procedures. The inspectors also attended the licensee drill critique to compare any inspector-observed weakness with those identified by the licensee staff in order to evaluate the critique and to verify whether the licensee staff was properly identifying weaknesses and entering them into the CAP. As part of the inspection, the inspectors reviewed the drill package and other documents listed in the Attachment to this report.

This emergency preparedness drill inspection constituted one sample as defined in IP 71114.06-05.

b. Findings

No findings were identified.

- .2 Training Observation
- a. Inspection Scope

The inspector observed a simulator training evolution for licensed operators on January 12, 2012, which required emergency plan implementation by a licensee operations crew. This evolution was planned to be evaluated and included in performance indicator data regarding drill and exercise performance. The inspectors observed event classification and notification activities performed by the crew. The inspectors also attended the post-evolution critique for the scenario. The focus of the inspectors' activities was to note any weaknesses and deficiencies in the crew's performance and ensure that the licensee evaluators noted the same issues and entered them into the CAP. As part of the inspection, the inspectors reviewed the scenario package and other documents listed in the Attachment to this report.

This inspection of the licensee's training evolution with emergency preparedness drill aspects constituted one sample as defined in IP 71114.06-05.

b. Findings

No findings were identified.

- .3 <u>Emergency Preparedness Drill Observation</u>
- a. Inspection Scope

The inspector observed an emergency preparedness drill on March 7, 2012, which required emergency plan implementation by the licensee.

This inspection constituted one emergency preparedness drill sample as defined in IP 71114.06-05.

b. Findings

No findings were identified.

2. RADIATION SAFETY

Cornerstones: Public Radiation Safety and Occupational Radiation Safety

2RS1 Radiological Hazard Assessment and Exposure Controls (71124.01)

This inspection constituted one complete sample as defined in IP 71124.01-05.

.1 <u>Inspection Planning</u> (02.01)

a. Inspection Scope

The inspectors reviewed all licensee performance indicators (PIs) for the Occupational Radiation Safety Cornerstone for follow-up. The inspectors reviewed the results of radiation protection (RP) program audits (e.g., licensee's quality assurance audits or other independent audits). The inspectors reviewed any reports of operational occurrences related to occupational radiation safety since the last inspection. The inspectors reviewed the results of the audit and operational report reviews to gain insights into overall licensee performance.

b. Findings

No findings were identified.

.2 Radiological Hazard Assessment (02.02)

a. Inspection Scope

The inspectors determined if there have been changes to plant operations since the last inspection that may result in a significant new radiological hazard for onsite workers or members of the public. The inspectors evaluated whether the licensee assessed the potential impact of these changes and has implemented periodic monitoring, as appropriate, to detect and quantify the radiological hazard.

The inspectors reviewed several radiological surveys from selected plant areas and evaluated whether the thoroughness and frequency of the surveys were appropriate for the given radiological hazard.

The inspectors conducted walkdowns of the facility, including radioactive waste processing, storage, and handling areas to evaluate material conditions and performed independent radiation measurements to verify conditions.

The inspectors selected and reviewed radiologically risk-significant work activities that involved exposure to radiation.

For these work activities, the inspectors assessed whether the pre-work surveys performed were appropriate to identify and quantify the radiological hazard and to establish adequate protective measures. The inspectors evaluated the radiological survey program to determine if hazards were properly identified, including the following:

- identification of hot particles;
- the presence of alpha emitters;
- the potential for airborne radioactive materials, including the potential presence of transuranics and/or other hard-to-detect radioactive materials (This evaluation may include licensee planned entry into non-routinely entered areas subject to previous contamination from failed fuel.);

- the hazards associated with work activities that could suddenly and severely increase radiological conditions and that the licensee has established a means to inform workers of changes that could significantly impact their occupational dose; and
- severe radiation field dose gradients that can result in non-uniform exposures of the body.

The inspectors reviewed work in potential airborne areas and evaluated whether the air samples were representative of the breathing air zone when applicable. The inspectors evaluated whether continuous air monitors were located in areas with low background to minimize false alarms and were representative of actual work areas. The inspectors evaluated the licensee's program for monitoring levels of loose surface contamination in areas of the plant with the potential for the contamination to become airborne.

b. Findings

No findings were identified.

- .3 Instructions to Workers (02.03)
- a. Inspection Scope

The inspectors selected various containers holding non-exempt licensed radioactive materials that may cause unplanned or inadvertent exposure of workers, and assessed whether the containers were labeled and controlled in accordance with 10 CFR 20.1904, "Labeling Containers," or met the requirements of 10 CFR 20.1905(g), "Exemptions To Labeling Requirements."

The inspectors reviewed radiation work permits used to access high radiation areas and evaluated the specified work control instructions or control barriers.

For these radiation work permits, the inspectors assessed whether allowable stay times or permissible dose (including from the intake of radioactive material) for radiologically significant work under each radiation work permit were clearly identified. The inspectors evaluated whether electronic personal dosimeter alarm setpoints were in conformance with survey indications and plant policy.

The inspectors reviewed selected occurrences where a worker's electronic personal dosimeter noticeably malfunctioned or alarmed. The inspectors evaluated whether workers responded appropriately to the off-normal condition. The inspectors assessed whether the issue was included in the corrective action program and dose evaluations were conducted as appropriate.

For work activities that could suddenly and severely increase radiological conditions, the inspectors assessed the licensee's means to inform workers of changes that could significantly impact their occupational dose.

b. Findings

No findings were identified.

.4 <u>Contamination and Radioactive Material Control</u> (02.04)

a. Inspection Scope

The inspectors observed locations where the licensee monitors potentially contaminated material leaving the radiological control area and inspected the methods used for control, survey, and release from these areas. The inspectors observed the performance of personnel surveying and releasing material for unrestricted use and evaluated whether the work was performed in accordance with plant procedures and whether the procedures were sufficient to control the spread of contamination and prevent unintended release of radioactive materials from the site. The inspectors assessed whether the radiation monitoring instrumentation had appropriate sensitivity for the type(s) of radiation present.

The inspectors reviewed the licensee's criteria for the survey and release of potentially contaminated material. The inspectors evaluated whether there was guidance on how to respond to an alarm that indicates the presence of licensed radioactive material.

The inspectors reviewed the licensee's procedures and records to verify that the radiation detection instrumentation was used at its typical sensitivity level based on appropriate counting parameters. The inspectors assessed whether or not the licensee has established a de facto "release limit" by altering the instrument's typical sensitivity through such methods as raising the energy discriminator level or locating the instrument in a high-radiation background area.

The inspectors selected several sealed sources from the licensee's inventory records and assessed whether the sources were accounted for and verified to be intact.

The inspectors evaluated whether any transactions, since the last inspection, involving nationally tracked sources were reported in accordance with 10 CFR 20.2207.

b. Findings

No findings were identified.

.5 Radiological Hazards Control and Work Coverage (02.05)

a. Inspection Scope

The inspectors evaluated ambient radiological conditions (e.g., radiation levels or potential radiation levels) during tours of the facility. The inspectors assessed whether the conditions were consistent with applicable posted surveys, radiation work permits, and worker briefings.

The inspectors evaluated the adequacy of radiological controls, such as required surveys, RP job coverage (including audio and visual surveillance for remote job coverage), and contamination controls. The inspectors evaluated the licensee's use of electronic personal dosimeters in high noise areas as high radiation area monitoring devices.

The inspectors assessed whether radiation monitoring devices were placed on the individual's body consistent with licensee procedures. The inspectors assessed whether

the dosimeter was placed in the location of highest expected dose or that the licensee properly employed an NRC-approved method of determining effective dose equivalent.

The inspectors reviewed the application of dosimetry to effectively monitor exposure to personnel in high-radiation work areas with significant dose rate gradients.

The inspectors reviewed radiation work permits for work within airborne radioactivity areas with the potential for individual worker internal exposures. For these radiation work permits, the inspectors evaluated airborne radioactive controls and monitoring, including potential for significant airborne levels (e.g., grinding, grit blasting, system breaches, entry into tanks, cubicles, and reactor cavities). The inspectors assessed barrier (e.g., tent or glove box) integrity and temporary high-efficiency particulate air ventilation system operation.

The inspectors examined the licensee's physical and programmatic controls for highly activated or contaminated materials (nonfuel) stored within spent fuel and other storage pools. The inspectors assessed whether appropriate controls (i.e., administrative and physical controls) were in place to preclude inadvertent removal of these materials from the pool.

The inspectors examined the posting and physical controls for selected high radiation areas and very-high radiation areas to verify conformance with the occupational performance indicator.

b. Findings

No findings were identified.

.6 <u>Risk-Significant High Radiation Area and Very-High Radiation Area Controls</u> (02.06)

a. Inspection Scope

The inspectors discussed with the RP manager the controls and procedures for high-risk high radiation areas and very-high radiation areas. The inspectors discussed methods employed by the licensee to provide stricter control of very-high radiation area access as specified in 10 CFR 20.1602, "Control of Access to Very-High Radiation Areas," and Regulatory Guide 8.38, "Control of Access to High and Very-High Radiation Areas of Nuclear Plants." The inspectors assessed whether any changes to licensee procedures substantially reduce the effectiveness and level of worker protection.

The inspectors discussed the controls in place for special areas that have the potential to become very-high radiation areas during certain plant operations with first-line health physics supervisors (or equivalent positions having backshift health physics oversight authority). The inspectors assessed whether these plant operations require communication before-hand with the health physics group, so as to allow corresponding timely actions to properly post, control, and monitor the radiation hazards including re-access authorization.

The inspectors evaluated licensee controls for very-high radiation areas and areas with the potential to become a very-high radiation area to ensure that an individual was not able to gain unauthorized access to the very-high radiation area.

b. Findings

No findings were identified.

.7 Radiation Worker Performance (02.07)

a. Inspection Scope

The inspectors observed radiation worker performance with respect to stated RP work requirements. The inspectors assessed whether workers were aware of the radiological conditions in their workplace and the radiation work permit controls/limits in place, and whether their performance reflected the level of radiological hazards present.

The inspectors reviewed radiological problem reports since the last inspection that found the cause of the event to be human performance errors. The inspectors evaluated whether there was an observable pattern traceable to a similar cause. The inspectors assessed whether this perspective matched the corrective action approach taken by the licensee to resolve the reported problems. The inspectors discussed with the RP manager any problems with the corrective actions planned or taken.

b. Findings

No findings were identified.

- .8 <u>Radiation Protection Technician Proficiency</u> (02.08)
- a. Inspection Scope

The inspectors observed the performance of the RP technicians with respect to all RP work requirements. The inspectors evaluated whether technicians were aware of the radiological conditions in their workplace and the radiation work permit controls/limits, and whether their performance was consistent with their training and qualifications with respect to the radiological hazards and work activities.

The inspectors reviewed radiological problem reports since the last inspection that found the cause of the event to be RP technician error. The inspectors evaluated whether there was an observable pattern traceable to a similar cause. The inspectors assessed whether this perspective matched the corrective action approach taken by the licensee to resolve the reported problems.

b. Findings

No findings were identified.

- .9 <u>Problem Identification and Resolution</u> (02.09)
- a. Inspection Scope

The inspectors evaluated whether problems associated with radiation monitoring and exposure control were being identified by the licensee at an appropriate threshold and were properly addressed for resolution in the licensee's CAP. The inspectors assessed the appropriateness of the corrective actions for a selected sample of problems

documented by the licensee that involve radiation monitoring and exposure controls. The inspectors assessed the licensee's process for applying operating experience to their plant.

b. Findings

No findings were identified.

2RS3 In-Plant Airborne Radioactivity Control and Mitigation (71124.03)

This inspection constituted a partial sample as defined in IP 71124.03-05.

- .1 Engineering Controls (02.02)
 - a. Inspection Scope

The inspectors reviewed the licensee's use of permanent and temporary ventilation to determine whether the licensee used ventilation systems as part of its engineering controls (in lieu of respiratory protection devices) to control airborne radioactivity. The inspectors reviewed procedural guidance for use of installed plant systems, such as the TSC, containment purge, spent fuel pool ventilation, and auxiliary building ventilation, and assessed whether the systems were used, to the extent practicable, during high-risk activities (e.g., using containment purge during cavity floodup).

The inspectors selected installed ventilation systems used to mitigate the potential for airborne radioactivity, and evaluated whether the ventilation airflow capacity, flow path (including the alignment of the suction and discharges), and filter/charcoal unit efficiencies, as appropriate, were consistent with maintaining concentrations of airborne radioactivity in work areas below the concentrations of an airborne area to the extent practicable.

The inspectors selected temporary ventilation system setups (high-efficiency particulate air (HEPA)/charcoal negative pressure units, down draft tables, tents, metal "Kelly buildings," and other enclosures) used to support work in contaminated areas. The inspectors assessed whether the use of these systems was consistent with licensee procedural guidance and as-low-as-is-reasonably-achievable (ALARA) concept.

The inspectors reviewed airborne monitoring protocols by selecting installed systems used to monitor and warn of changing airborne concentrations in the plant and evaluating whether the alarms and setpoints were sufficient to prompt licensee/worker action to ensure that doses were maintained within the limits of 10 CFR Part 20 and the ALARA concept.

The inspectors assessed whether the licensee had established trigger points (e.g., the Electric Power Research Institute's "Alpha Monitoring Guidelines for Operating Nuclear Power Stations") for evaluating levels of airborne beta-emitting (e.g., plutonium-241) and alpha-emitting radionuclides.

b. Findings

<u>Introduction</u>: A URI was identified because additional information was needed by the inspectors to assess the licensee's program for assuring and maintaining the radiological habitability of the TSC in accordance with NRC regulatory requirements.

<u>Description</u>: The inspectors reviewed the licensee's TSC ventilation system charcoal and HEPA filter testing procedures and protocols. The inspectors reviewed the licensee's design bases for ensuring that the TSC ventilation system maintains the facility radiologically habitable with the cumulative individual exposures to less than 5 Rem total effective dose equivalent (TEDE) for the duration of design bases accidents. The inspectors identified that the acceptance criteria for the procedurally-defined tests on the charcoal and HEPA filters was different from the assumptions used in the ventilation system design bases calculations. The inspectors determined that more information was needed from the licensee to fully understand the impact of these differences (URI 05000266/2012002-05; 05000301/2012002-05, TSC Filter Testing May Be Inadequate).

2RS4 Occupational Dose Assessment (71124.04)

This inspection constituted a partial sample as defined in IP 71124.04-05.

.1 <u>Special Dosimetric Situations</u> (02.04)

Assigning Dose of Record

a. Inspection Scope

For the special dosimetric situations reviewed in this section, the inspectors assessed how the licensee assigned dose of record for total effective dose equivalent, shallow dose equivalent, and lens dose equivalent. This included an assessment of external and internal monitoring results, supplementary information on individual exposures (e.g., radiation incident investigation reports and skin contamination reports), and radiation surveys and/or air monitoring results when dosimetry was based on these techniques.

b. Findings

<u>Introduction</u>: The inspectors identified a finding of very low safety significance (Green) and associated NCV of 10 CFR 20.1201(c) for the failure to accurately assess and assign the appropriate individual dose received on multiple (three) occasions in the first quarter 2010, given thermoluminescent dosimeter (TLD) to electronic dosimeter (ED) data mismatches.

<u>Description</u>: The inspectors identified an issue of concern in that the licensee did not perform a complete dose assessment based on sound technical principles nor assign and record the highest dose received for three individuals that had radiation exposure data mismatches on their personal dosimeters. Licensee procedures require that when the actual dose to an individual is greater than 100 mRem and the TLD to ED discrepancy is greater than plus or minus 25 percent, the licensee is required to record the highest dose received by the individual. In the first quarter of 2010 there were three

occurrences when individuals received greater than 100 mRem and the TLD to ED discrepancy was greater than 25 percent. Licensee records reviewed by the inspectors indicated that the discrepancies were due to workers being in radiation dose gradient fields and the lower dose (TLD dose) was assigned to each individual. The NRC inspectors determined that individuals working in dose gradient fields do not constitute sufficient technical bases to adequately explain which of the dosimeters is more indicative of the actual dose received by the individual.

<u>Analysis</u>: The inspectors determined that the issue of concern was a performance deficiency because the licensee did not perform a complete dose assessment based on sound technical principles, nor record the highest dose received for each individual involved. The inspectors determined that the cause of the performance deficiency was reasonably within the licensee's ability to foresee and correct, and should have been prevented.

The finding was not subject to traditional enforcement since the incidents did not have a significant safety consequence, did not impact the NRC's ability to perform its regulatory function, and were not willful.

The inspectors reviewed the guidance in IMC 0612, Appendix E, "Examples of Minor issues," dated August 11, 2009, and did not find any similar examples. The performance deficiency was determined to be of more than minor safety significance in accordance with IMC 0612, Appendix B, "Issue Screening," dated December 24, 2009, because it was associated with the program and process attribute of the Occupational Radiation Safety Cornerstone and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that not assigning an individual their highest dose received affected the licensee's ability to monitor, control, and limit radiation exposures.

In accordance with IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," dated August 19, 2008, the inspectors determined that the finding had very low safety significance (Green) because the finding did not involve: (1) ALARA planning and controls, (2) a radiological overexposure, (3) there was not a substantial potential for an overexposure, and (4) there was no compromised ability to assess dose.

The inspectors identified that the primary cause of this finding was related to the cross-cutting aspect of human performance, work practices. Specifically, that the licensee ensures the use of human error prevention techniques. H.4(a).

Enforcement: Regulation 10 CFR 20.1201(c) states, in part, that "the assigned deep dose equivalent must be for the part of the body receiving the highest exposure." If the dosimeter is not representative of the maximum dose, surveys or other measurements must be used to assess the actual maximum dose. Contrary to the above, in the first quarter of 2010, the licensee failed to assign three workers the appropriate dose of record. Immediate corrective actions included assigning the appropriate exposures to the involved individuals. Since the violation of 10 CFR 20.1201(c) was of very low safety significance and has been entered in the licensee's CAP (as AR01730419), this violation is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy (NCV 05000266/2012002-06, Determining an Individual's Dose of Record With Discrepant TLD/ED Data Inputs).

2RS5 Radiation Monitoring Instrumentation (71124.05)

This inspection constituted a partial sample as defined in IP 71124.05-05.

.1 Inspection Planning (02.01)

a. Inspection Scope

The inspectors reviewed the plant FSAR to identify radiation instruments associated with monitoring area radiological conditions, including airborne radioactivity, process streams, effluents, materials/articles, and workers. Additionally, the inspectors reviewed the instrumentation and the associated TS requirements for post-accident monitoring instrumentation, including instruments used for remote emergency assessment.

The inspectors reviewed a listing of in-service survey instrumentation, including air samplers and small article monitors, along with instruments used to detect and analyze workers' external contamination. Additionally, the inspectors reviewed personnel contamination monitors and portal monitors, including whole-body counters, to detect workers' internal contamination. The inspectors reviewed this list to assess whether an adequate number and type of instruments were available to support operations.

The inspectors reviewed licensee and third-party evaluation reports of the radiation monitoring program since the last inspection. These reports were reviewed for insights into the licensee's program and to aid in selecting areas for review ("smart sampling").

The inspectors reviewed the area radiation monitor alarm setpoint values and setpoint bases as provided in the TSs and the FSAR.

b. Findings

No findings were identified.

- .2 <u>Walkdowns and Observations</u> (02.02)
- a. Inspection Scope

The inspectors selected portable survey instruments that were in use or available for issuance and assessed calibration and source check stickers for currency, as well as instrument material condition and operability.

The inspectors observed licensee staff performance as the staff demonstrated source checks for various types of portable survey instruments. The inspectors assessed whether high-range instruments were source checked on all appropriate scales.

The inspectors walked down area radiation monitors and continuous air monitors to determine whether they were appropriately positioned relative to the radiation sources or areas they were intended to monitor. Selectively, the inspectors compared monitor response (via local or remote control room indications) with actual area conditions for consistency.

The inspectors selected personnel contamination monitors, portal monitors, and small article monitors and evaluated whether the periodic source checks were performed in accordance with the manufacturer's recommendations and licensee procedures.

b. Findings

No findings were identified.

.3 <u>Calibration and Testing Program</u> (02.03)

Laboratory Instrumentation

a. Inspection Scope

The inspectors assessed laboratory analytical instruments used for radiological analyses to determine whether daily performance checks and calibration data indicated that the frequency of the calibrations was adequate and there were no indications of degraded instrument performance.

The inspectors assessed whether appropriate corrective actions were implemented in response to indications of degraded instrument performance.

b. Findings

No findings were identified.

- .4 Portal Monitors, Personnel Contamination Monitors, and Small Article Monitors
- a. Inspection Scope

For each type of these instruments used on site, the inspectors assessed whether the alarm setpoint values were reasonable under the circumstances to ensure that licensed material was not released from the site.

The inspectors reviewed the calibration documentation for each instrument selected and discussed the calibration methods with the licensee to determine consistency with the manufacturer's recommendations.

b. Findings

No findings were identified.

- .5 <u>Portable Survey Instruments, Area Radiation Monitors, Electronic Dosimetry, and Air</u> <u>Samplers/Continuous Air Monitors</u>
- a. Inspection Scope

The inspectors reviewed calibration documentation for at least one of each type of instrument. For portable survey instruments and area radiation monitors, the inspectors reviewed detector measurement geometry and calibration methods and had the licensee demonstrate use of its instrument calibrator as applicable. The inspectors conducted comparison of instrument readings versus an NRC survey instrument if problems were suspected.

As available, the inspectors selected portable survey instruments that did not meet acceptance criteria during calibration or source checks to assess whether the licensee had taken appropriate corrective action for instruments found significantly out of calibration (greater than 50 percent). The inspectors evaluated whether the licensee had evaluated the possible consequences of instrument use since the last successful calibration or source check.

b. Findings

No findings were identified.

- .6 Instrument Calibrator
- a. Inspection Scope

As applicable, the inspectors reviewed the current output values for the licensee's portable survey and area radiation monitor instrument calibrator unit(s). The inspectors assessed whether the licensee periodically measured calibrator output over the range of the instruments used through measurements by ion chamber/electrometer.

The inspectors assessed whether the measuring devices had been calibrated by a facility using National Institute of Standards and Technology traceable sources and whether corrective factors for these measuring devices were properly applied by the licensee in its output verification.

b. Findings

No findings were identified.

- .7 Calibration and Check Sources
- a. Inspection Scope

The inspectors reviewed the licensee's 10 CFR Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste," source term to assess whether calibration sources used were representative of the types and energies of radiation encountered in the plant.

b. Findings

No findings were identified.

- .8 <u>Problem Identification and Resolution</u> (02.04)
- a. Inspection Scope

The inspectors evaluated whether problems associated with radiation monitoring instrumentation were being identified by the licensee at an appropriate threshold and were properly addressed for resolution in the licensee's CAP. The inspectors assessed the appropriateness of the corrective actions for a selected sample of problems documented by the licensee that involve radiation monitoring instrumentation.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, and Emergency Preparedness

4OA1 Performance Indicator Verification (71151)

- .1 Unplanned Scrams per 7000 Critical Hours
 - a. Inspection Scope

The inspectors sampled licensee submittals for the Unplanned Scrams per 7000 Critical Hours PI for Units 1 and 2 for the first quarter 2011 through the fourth quarter 2011. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, dated October 2009, were used. The inspectors reviewed the licensee's operator narrative logs, issue reports, event reports, and NRC Integrated IRs for January 1 through December 31, 2011, to validate the accuracy of the submittals. The inspectors also reviewed the licensee's CAP to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two unplanned scrams per 7000 critical hours samples as defined in IP 71151-05.

b. Findings

No findings were identified.

- .2 Unplanned Transients per 7000 Critical Hours
- a. Inspection Scope

The inspectors sampled licensee submittals for the Unplanned Transients per 7000 Critical Hours PI for Units 1 and 2 for the first quarter 2011 through the fourth quarter 2011. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, dated October 2009, were used. The inspectors reviewed the licensee's operator narrative logs, issue reports, maintenance rule records, event reports, and NRC Integrated IRs for January 1 through December 31, 2011, to validate the accuracy of the submittals. The inspectors also reviewed the licensee's CAP to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two unplanned transients per 7000 critical hours samples as defined in IP 71151-05.

b. <u>Findings</u>

No findings were identified.

4OA2 Identification and Resolution of Problems (71152)

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, and Occupational Radiation Safety

.1 Routine Review of Items Entered into the Corrective Action Program

a. Inspection Scope

As part of the various baseline inspection procedures discussed in previous sections of this report, the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that they were being entered into the licensee's CAP at an appropriate threshold, that adequate attention was being given to timely corrective actions, and that adverse trends were identified and addressed. Attributes reviewed included: identification of the problem was complete and accurate; timeliness was commensurate with the safety significance; evaluation and disposition of performance issues, generic implications, common causes, contributing factors, root causes, extent-of-condition reviews, and previous occurrences reviews were proper and adequate; and that the classification, prioritization, focus, and timeliness of corrective actions were commensurate with safety and sufficient to prevent recurrence of the issue. Minor issues entered into the licensee's CAP as a result of the inspectors' observations are included in the Attachment to this report.

These routine reviews for the identification and resolution of problems did not constitute any additional inspection samples. Instead, by procedure they were considered an integral part of the inspections performed during the quarter and documented in Section 1 of this report.

b. Findings

No findings were identified.

.2 Daily Corrective Action Program Reviews

a. Inspection Scope

In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's CAP. This review was accomplished through inspection of the station's daily CR packages.

These daily reviews were performed by procedure as part of the inspectors' daily plant status monitoring activities and, as such, did not constitute any separate inspection samples.

b. Findings

No findings were identified.

.3 <u>Semi-Annual Trend Review</u>

a. Inspection Scope

The inspectors performed a review of the licensee's CAP and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors' review was focused on repetitive equipment issues, but also considered the results of daily inspector CAP item screening discussed in Section 4OA2.2 above, licensee trending efforts, and licensee human performance results. The inspectors' review nominally considered the six-month period of September 2011 through March 2012, although some examples expanded beyond those dates where the scope of the trend warranted.

The review also included issues documented outside the normal CAP in major equipment problem lists, repetitive and/or rework maintenance lists, departmental problem/challenges lists, system health reports, quality assurance audit/surveillance reports, self-assessment reports, and Maintenance Rule assessments. The inspectors compared and contrasted their results with the results contained in the licensee's CAP trending reports. Corrective actions associated with a sample of the issues identified in the licensee's trending reports were reviewed for adequacy.

This review constituted one semi-annual trend inspection sample as defined in IP 71152-05.

b. Findings

(1) Failure to Perform Operability Evaluations as Required by Procedure

<u>Introduction</u>: The inspectors identified a finding of very low safety significance and associated NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to perform an operability evaluation for the impact of deficient door to function as a high-energy line break (HELB) barrier, fire (safe shutdown) door, and flood barrier. Specifically, the inspectors identified CRs, for the previous 6-month period, identifying degraded door conditions in which the licensee's evaluation/documentation of the impact of the door deficiencies was not performed as required by licensee procedures.

<u>Description</u>: The inspectors identified 85 CRs, from the previous 6-month period, related specifically to door deficiencies. As such, the inspectors chose to look at door deficiencies as a semi-annual trend due to the potential for these to represent degraded or non-conforming conditions with respect to the design aspects of HELB, fire (safe shutdown), flood barriers, and other features, such as ventilation boundaries.

For the period, the inspectors selected 10 CRs for door deficiencies. Of the 10 CRs selected, the inspectors identified 5 of which the operability evaluations of the impact of the deficiencies on the door's ability to function as a HELB barrier, safe shutdown door, flood barrier, and other features, such as ventilation boundaries, were not documented or evaluated as discussed below.

• AR01715789 identified a degraded or non-conforming condition regarding the ability of a door to open. The licensee concluded in a generic operability evaluation that the door did not represent a degraded or unanalyzed condition.

The licensee did not provide evidence that all aspects of the non-conformance were assessed. The inspectors identified that this door was required by AOP-9A, "Service Water System Malfunction," to be capable of being opened during an internal flood. The ability to take the manual action required by the AOP was not documented/evaluated in the operability evaluation.

- AR01742693 identified a degraded or non-conforming condition regarding a door having "two wheeled carts and a heater placed in the door opening." A generic operability evaluation statement was documented. The inspectors identified that this was a safe shutdown door per station procedure OM 3.27, "Control of Fire Protection and Appendix R Safe Shutdown Equipment." The ability of the door to function as a safe shutdown door was not documented/evaluated in the operability evaluation.
- AR01735777 identified a degraded or non-conforming condition regarding a door being left unsecured. A generic operability evaluation statement was documented. The inspectors identified that this door was credited as a HELB door per NP 8.4.16, "PBNP High Energy Line Break Barriers/Vent Paths," flood barrier per NP 8.4.17, "PBNP Flooding Barrier Control," and safe shutdown door per OM 3.27. The licensee's additional evaluation concluded that HELB and flood barrier aspects were not impacted; however, the operability evaluation failed to address the ability of the door to function as a safe shutdown door.
- AR01741334 identified a degraded or non-conforming condition regarding the ability of the door to open based on a broken latching device. A generic operability evaluation statement was documented. The inspectors identified that this door was credited as a HELB door per NP 8.4.16. The ability of the door to function as a HELB door had not been documented/evaluated in the operability evaluation.
- AR01715513 identified a degraded or non-conforming condition regarding a door being left unsecured. A generic operability evaluation statement was documented. The inspectors identified that this door was credited as a safe shutdown door per OM 3.27. The ability of the door to function as a safe shutdown door was not documented/evaluated in the operability evaluation.

Additionally, the inspectors identified that 2 of the 10 CRs (AR01739210 and AR01736799) did not identify the specific deficient door. In one case, the licensee identified the problem with the door as a condition not adverse to quality and did not perform an operability evaluation. In the second case, the operability evaluation concluded it was only security door violation. In both cases, the doors were not evaluated for the impact on the design aspects of HELB, fire, or flood barriers. The inspectors could not ascertain how the operability evaluation was accomplished when the door was not identified in a manner that would allow a determination of the design aspects applicable to the door.

Also, during this period, the licensee identified a potential trend regarding plant door deficiencies. The inspector's reviewed PI-AA-207, "Trending Coding and Analysis," which defined a potential trend as "a chance in frequency of occurrence of a given parameter or a change in the level of performance of a particular group, process, program, or procedure." The period of the licensee's trend encompassed the inspectors' selection window, however, their trend failed to identify any of the observations noted by the inspectors. The licensee's trend identified 51 CRs between November 2011 and February 2012 that discussed various door deficiencies and noted that many of the doors were security, fire, or HELB doors. However, the licensee's condition evaluation

of the trend focused on the adequacy of the current preventative maintenance program, and concluded that no additional preventative maintenance activities were required.

Due to this apparent trend regarding operability evaluations and from other previously discussed observations, as documented in IR 05000266/2011008, 05000301/2011008; the inspectors chose to sample 10 percent of the CRs identified by the licensee, and found that the operability evaluation in 80 percent of those selected failed to evaluate or document the impact of this door deficiency on the ability to function as either HELB door per NP 8.4.16, a flood barrier per NP 8.4.17, or a safe shutdown door per OM 3.27. For example, AR01725391 identified a degraded or non-conforming condition regarding the door seal missing bottom screws. The operability evaluation concluded that the control room envelope was operable because it had passed its most recent inservice test. The ability of the door to function as a HELB barrier and safe shutdown door was not documented/evaluated in the operability evaluation.

Additionally, in December 2011, the inspectors found CRs that identified doors that were degraded, and therefore were potentially inoperable and reportable. These CRs were discussed with the licensee and in each case, additional research was needed to support the licensee's conclusion that the doors were operable due to the lack of documentation in each CR. The inspectors were unable to identify any technical assessment for reportability performed for the CRs identified. As such, the inspectors were concerned that these additional identified issues were potentially reportable for the previous 3-year period. The inspectors performed a cursory review and found additional CRs where similar documentation/evaluation issues existed with respect to the design aspects of HELB, fire (safe shutdown), flood barriers, and other features such as ventilation boundaries. The licensee generated AR01751811 to review the operability evaluations for doors from September 2011 to March 2012. The licensee completed their evaluation and determined that review of the previous 3-year period was not necessary. The inspectors considered the reportability of the door problems as unresolved pending inspector review of the previous 3-year period (URI 05000266-2012002-07; 05000301/2012002-07, Past Reportability of Degraded Hazard Barrier Doors Not Performed).

The inspectors reviewed PI-AA-204, "Condition Identification and Screening Process," and found that operability screening was required "when the degraded or nonconforming condition calls into question the operability of technical specification SSC, or the issue is potentially reportable." The procedure further states that review of the condition for operability, past operability, and functionality is required per fleet procedure EN-AA-203-1001, "Operability Determinations/Functionality Assessments." Specifically, the inspectors found that EN-AA-203-1001, Step 4.3 requires an immediate operability determination to determine if an SSC is affected; if a degraded/nonconforming condition exists; if equipment is operable per TSs; if the SSC is required for current mode of operation; if past operability was affected; and, if the condition is reported to the NRC. Additionally, the procedure requires verification of the adequacy of the operability documentation such that the rationale for operability is sufficient detailed so that another technically knowledgeable individual can understand the basis.

<u>Assessment</u>: The inspectors concluded that the failure to document and evaluate operability evaluations as required by EN-AA-203-1001 was a performance deficiency warranting further review.

Using IMC 0612, Appendix B, "Issue Screening," dated December 24, 2009, the inspectors determined that this finding was more than minor because, if left uncorrected, the failure to perform operability evaluations and recognize conditions that could render equipment inoperable had the potential to lead to a more significant safety concern. The inspectors determined the finding could be evaluated using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a for the Mitigating Systems, dated January 10, 2008. Relative to the performance deficiency, the inspectors answered "No" to all of the questions in the Mitigating Systems column of Table 4a; therefore, the finding screened as very low safety significance (Green).

Procedure PI-AA-204, Attachment 5, Step 6.C, stated that the initial screening team "consider implementing interim corrective actions to mitigate further events." Procedure PI-AA-205 weakly defined compensatory/interim actions and when they needed to be implemented. The inspectors noted that IR 05000266/2011008, 05000301/2011008, identified the weakness in guidance and implementation of compensatory actions. For this reason, the inspectors determined this finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action, because the licensee failed to take appropriate action to address safety issues and adverse trends in a timely manner. Although the licensee had previously recognized this and initiated training to correct the knowledge-based aspects of the issue, there were no interim barriers in place during the long duration needed to complete the training activity (P.1(d)).

<u>Enforcement</u>: Title 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," states in part, that activities affecting quality shall be prescribed and accomplished in accordance with the procedures. Contrary to this requirement, the inspectors identified CRs from December 13, 2011, through March 8, 2012, that identified degradation of doors credited as HELB barriers, safe shutdown doors, and flood barriers, and the licensee failed to perform an operability evaluation of the conditions as required by EN-AA-203-1001, Step 4.3.1.

Because this violation was of very low safety significance and it was entered into the licensee's CAP (as AR01751804), this violation is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy (NCV 05000266/2012002-08; 05000301/2012002-08, Failure to Perform Operability Evaluations as Required by Procedure).

<u>Selected Issue Follow-Up Inspection: Technical Support Center Ventilation Design and</u> <u>Testing Acceptance Criteria</u>

a. Inspection Scope

During a review of items entered in the licensee's CAP, the inspectors found recent corrective action items documenting repetitive problems associated the TSC ventilation system design and testing acceptance criteria. The inspectors questioned the licensee's evaluation of various CRs pertaining to the TSC ventilation system with respect to the ventilation boundary and stairwells adjacent to the TSC. Specifically, the inspectors noted that the functionality of the TSC ventilation was not addressed during the licensee's screening process, and thus the impact of the various conditions on the TSC

ventilation system's ability to meet its design functions or the testing acceptance criteria was not evaluated.

The licensee entered the inspector's concerns into the CAP as AR01722122 and AR01742275. The licensee performed evaluations of the various conditions, and demonstrated through testing and analysis, that the stairwells were maintained at a positive pressure therefore precluding the spread of contamination and resolving the inspectors' concern. Additionally, the licensee's corrective actions determined that the TSC boundary would be expanded to include the stairwells, periodic testing of the stairwells would be performed, and reconstitution of the licensing basis of the TSC would be performed.

This review constituted one in-depth problem identification and resolution sample as defined in IP 71152-05.

b. Findings

No findings were identified.

- .2 <u>Selected Issue Follow-Up Inspection: Steam Generator Blowdown Flow Drifts and Can</u> <u>Potentially Offset Licensed Thermal Power</u>
- a. Inspection Scope

During a review of items entered in the licensee's CAP, the inspectors recognized a corrective action item documenting steam generator blowdown flow drifts. The inspectors selected AR01718962, "Manual Blowdown Flow Enter Into PPCS [plant process computer system] Affects RTO [reactor thermal output]," for review. The CR describes a situation where steam generator blowdown values drift non-conservative relative to the manual data input into the computer for calculating reactor power. The inspectors reviewed licensee records and procedures relative to the issue and found that at no time did the magnitude of the error result in exceeding licensed thermal power. The inspectors found that the licensee had operated with sufficient margin to the licensed limit that any minor errors that resulted in the displayed reactor output were small enough that the licensed limit had not been exceeded. The licensee initiated corrective actions to ensure the magnitude of drift would not result in operations beyond the licensed thermal limit. Actions included providing margin during input of manual data and a design change to automate the function with remote monitoring of the related parameters from the control room.

This review constituted one in-depth problem identification and resolution sample as defined in IP 71152-05.

b. Findings

No findings were identified.

.3 <u>Selected Issue Follow-Up Inspection: Shift Manager Placed on Outage Hours</u>

a. Inspection Scope

During the Unit 1 outage performed from October 3 through December 17, 2011, the inspectors selected the shift manager (SM) position for review as part of the fatigue assessment activities for IP 71111.20. The inspectors found that the licensee had placed the SM on controls for outage hours. The inspectors inquired about the practice and the licensee indicated that alternate licensed and active senior reactor operators (SROs) working operating hours were available to relieve the SM if needed. After the conclusion of the inspection continuing discussions with Office of Nuclear Reactor Regulation (NRR) and operator licensing examiners indicated that this practice may not be acceptable. The inspectors elected to review this practice as a selected issue follow-up item.

This review constituted one in-depth problem identification and resolution sample as defined in IP 71152 05.

b. Findings

<u>Introduction</u>: During the inspectors' review of fatigue rule implementation, the inspectors identified a URI relative to the licensee's placing of the SM on outage hours in lieu of operating hours.

<u>Description</u>: The inspectors selected the SM position for review as a selected issue follow-up inspection due to potential issues with the application of the rule to the SM position during the recent Unit 1 refueling outage. The inspectors found that the licensee had placed the SM on outage hours as indicated by 10 CFR 26, Subpart I, "Managing Fatigue." The inspectors reviewed the requirements of 10 CFR 26.205(d)(4) to assess if the SM position could be exempted from the operating hour restrictions. The inspectors inquired about the practice, and the licensee indicated that alternate licensed and active SROs on operating hours were available to relieve the SM if needed. The inspectors found that the alternate operator was located outside of the control room performing outage related duties, but was not able to ascertain if the alternate operator was meaningfully and fully engaged in the activities of a watch stander on the operating unit. Therefore, the inspectors were concerned that the alternate operator could not be credited as an SRO on watch.

At the conclusion of the inspection period, the inspectors and NRR were reviewing the regulatory requirements and the nexus of those requirements to the licensee's practice of designating an alternate SRO as the SM. Additionally, the licensee was reviewing the activities performed by the alternate watch stander to ascertain if the position could be credited as being "on-watch." This issue is unresolved pending the aforementioned reviews (URI 05000266/2012002-09, Shift Manager Working Outage Hours May Be Contrary To Guidance).

.4 <u>Selected Issue Follow-Up Inspection: Partial Turnover of Extended Power Uprate</u> <u>Modifications</u>

a. Inspection Scope

During a review of items entered in the licensee's CAP, the inspectors identified various corrective action item reports identifying problems with the modification turnover process of EPU modifications installed during recent refueling outages. Specifically, the inspectors identified CRs for various systems documenting that procedures were not updated post-EPU modifications (AR01729232); that completed WOs lacked as-built design modifications layouts (AR01733329); that modification packages failed to identify impacted calculations (AR01724745); that modification closeout exceeded the 90-day requirement (AR01725589); that procedures did not exist for newly-installed systems (AR01728250); and, that modification packages lacked documentation of design drawings, welding records, and quality inspection records (AR01721892). As such, the inspectors began reviewing the licensee's partial turnover process, which allowed operations to accept turnover of systems prior to the final completion of modification work. The inspectors requested documentation regarding modification partial and final completion dates, engineering review dates, documentation closure dates, and additional CRs documented as a result of these discrepancies for EPU modifications. At the completion of the inspection period, the inspectors were awaiting the requested documentation from the licensee to complete their review of this issue.

This review constituted a partial in-depth problem identification and resolution sample as defined in IP 71152-05.

b. Findings

No findings were identified.

- 40A5 Other Activities
 - .1 Institute of Nuclear Power Operations (INPO) Plant Assessment Report Review
 - a. Inspection Scope

The inspectors reviewed the final report for the INPO plant assessment conducted from January 2011 through February 2011, and issued in October 2011. The inspectors reviewed the report to ensure that issues identified were consistent with the NRC perspectives of licensee performance and to verify if any significant safety issues were identified that required further NRC follow-up.

b. Findings

No findings were identified.

4OA6 Management Meetings

.1 Exit Meeting Summary

On April 3, 2012, the inspectors presented the inspection results to Mr. Larry Meyer and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

.2 Interim Exit Meetings

Interim exits were conducted for:

• The inspection results for the areas of radiological hazard assessment and exposure controls; in-plant reactivity control and mitigation, occupational dose assessment, radiation monitoring instrumentation; and RCS specific activity, occupational exposure control effectiveness, and RETS/ODCM radiological effluent occurrences performance indicator verification with Steve Brown, Engineering Manager, on February 3, 2012.

The inspectors confirmed that none of the potential report input discussed was considered proprietary. Proprietary material received during the inspection was returned to the licensee.

4OA7 Licensee-Identified Violations

None.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

<u>Licensee</u>

- J. Schleif, Emergency Preparedness Manager
- J. Costedio, Licensing Manager
- L. Meyer, Site Vice President
- B. Jensen, NDE Level III
- B. Scherwinski, Licensing Analyst
- S. Forsha, Reactor Vessel Program Engineer

Nuclear Regulatory Commission

M. Kunowski, Chief, Reactor Projects Branch 5

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

<u>Opened</u>

05000266/2012002-01; 05000301/2012002-01	URI	External Flooding Design and Mitigation Strategies Maintained and Tested Appropriately (Section 1R01)
05000301/2012002-02	URI	Post-Maintenance Test On Main Feedwater Regulating Valve AMSAC Switches Deferred To Later Date (Section 1R19)
05000301/2012002-03	NCV	Failure to Follow Procedure and Implement
		Post-Maintenance Testing for Main Feedwater Regulating
		Valves Following EPU Modifications (Section 1R19)
05000266/2012002-04;	NCV	Scaffold Construction Interferes with the Operation of
05000301/2012002-04		Containment Spray Suction Valve (Section 1R22)
05000266/2012002-05;	URI	TSC Filter Testing May Be Inadequate (Section 2RS3)
05000301/2012002-05		
05000266/2012002-06	NCV	Determining an Individual's Dose of Record With
		Discrepant TLD/ED Data Inputs (Section 2RS4)
05000266/2012002-07;	URI	Past Reportability of Degraded Hazard Barrier Doors Not
05000301/2012002-07		Performed (Section 4OA2.3(1))
05000266/2012002-08;	NCV	Failure to Perform Operability Evaluations as Required by
05000301/2012002-08		Procedure (Section 4OA2.3(1))
05000266/2012002-09	URI	Shift Manager Working Outage Hours May Be Contrary To
		Guidance (Section 4OA2.6)

<u>Closed</u>

05000301/2012002-03	NCV	Failure to Follow Procedure and Implement Post-Maintenance Testing for Main Feedwater Regulating Valves Following EPU Modifications (Section 1R19)
05000266/2012002-04; 05000301/2012002-04	NCV	Scaffold Construction Interferes with the Operation of Containment Spray Suction Valve (Section 1R22)
05000266/2012002-06	NCV	Determining an Individual's Dose of Record With Discrepant TLD/ED Data Inputs (Section 2RS4)
05000266/2012002-08; 05000301/2012002-08	NCV	Failure to Perform Operability Evaluations as Required by Procedure (Section 4OA2.3(1))

LIST OF DOCUMENTS REVIEWED

The following is a partial list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspector reviewed the documents in their entirety, but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

1R01 Adverse Weather Protection

- 5.4 Procedures; Unit 1 Amendment No. 201, Unit 2 Amendment No. 206
- 50.59 Evaluation No. 2007-005; EC 11416; Façade Flooding And Grout Removal; Revision 0
- AOP-13A; Circulating Water System Malfunction; Revision 17
- AOP-13C; Severe Weather Conditions; Revision 25
- AOP-28; Seismic Event; Revision 5
- AR00908558; Turbine Building Flood Dampers Have No Periodic Functional Check
- AR01289435; Turbine Building Flood Dampers Have No Periodic Functional Check
- BG AOP-13A; Circulating Water System Malfunction; Revision 14
- BG AOP-13C; Severe Weather Conditions; Revision 14
- BG AOP-28; Seismic Event; Revision 4
- DBD-T-41 Modula A; Hazards Internal And External Flooding (Module A); Revision 8
- EPIP 1.2.1; Emergency Action Level Technical Basis; Revision 8
- FSAR Section 1.3; General Design Criteria; UFSAR 2010
- FSAR Section 2.10; Environmental Conclusions; UFSAR 2010
- FSAR Section 2.5; Hydrology; UFSAR 2010
- NP 10.3.7; On-line Safety Assessment; Revision 26
- NP 7.7.9; Facilities Monitoring Program; Revision 7
- NP 8.4.17; PBNP Flooding Barrier Control; Revision 14
- NRC Original Safety Evaluation Report; July 15, 1970
- OM-AA-101-1000; Shutdown Risk Management; Revision 3
- PBNP IPE Section 3.3; Internal Flooding
- PC 80 Part 7; Lake Water Level Determination; Revision 3
- Report From Sargent & Lundy, Engineers; Point Beach Nuclear Plant Wisconsin Michigan Power Company, Maximum Deep Water Waves & Beach Run-Up At Point Beach; January 14, 1967

1R04 Equipment Alignment

- 1-CL-CC-001; Component Cooling Water Unit 1; Revision 15
- 1-SOP-CC-001; Component Cooling System; Revision 21
- AR01723960; Door 105B (Fire Door) Doesn't Automatically Close
- AR01726688; Door-105B Requires Manual Force To Pull/Push It Shut
- AR01730723; Small CCW Transfer From U1 To U2 Following IT-800
- CL 10B; Service Water Safeguards Lineup; Revision 68
- CL 10J; Safeguards Service Water System Checklist Unit 2; Revision 27
- CL 11A G-03; G-03 Diesel Generator Checklist; Revision 8
- DBD-16; Emergency Diesel Generator System; Revision 17
- Drawing 018995; P&ID Service Water; Revision 77
- Drawing 080034; P&ID Service Water; Revision 66
- Drawing 110E018; Sht 3; Auxiliary Coolant System; Revision 42

- Drawing 6704-D-323101; 4160V SWGR Bus 1-A06 (2-A06) Output Breaker 1A52-80 (2A52-93) From Diesel Generator G-03 (G-04); Revision 15
- FEP 4.27; Emergency Diesel Generator Building (G-03/G-04); Revision 4
- IT-800; Component Cooling Water System Valves; Revision 4

1R05 Fire Protection

- AR01723960; Door 105B (Fire Door) Doesn't Automatically Close
- AR01726688; Door-105B Requires Manual Force To Pull/Push It Shut
- AR01728588; No Indication Of Power To Hydrogen Detector In CAS
- AR01730632; Extension Building Battery Room Hydrogen Detector OOS
- AR01734350; Door 345 Maglock In Need Of Adjustment Or Replacement
- AR01736153; Questionable CR Closure
- Duke Engineering And Services Fire Area Analysis Summary Report For Fire Areas A47, Extension Building And A39, South Gatehouse; August 8, 2005
- Email From C. Storm To R. Harrsch, Forwarded To S. Bowe; Subject: FW: Fire On 2/3/12; February 6, 2012
- FAP 3.0; Fire Attack Plans; Revision 9
- FEP 4.0; Fire Emergency Plan; Revision 5
- FEP 4.20; Site; Revision 8
- Fire Protection/Appendix R Fire Surveillance; Commenced June 16, 2008 And August 26, 2007
- NP 5.2.11; Fire Protection Program Documentation; Revision 10
- OM 3.27; Control Of Fire Protection & Appendix R Safe Shutdown Equipment; Revision 44
- PC 74; Conducting And Evaluation Fire Drills; Completed February 8, 2012
- Station Log; February 3, 2012

1R06 Flood Protection

- AR01382224; Prompt Operability Determination Not Identified
- AR01641275; Manhole #1 Degraded Cable Supports
- AR01641291; Manhole #2 Degraded Cable Supports
- AR01699070; Unit 2 North Turbine Hall Sump Pumps Capacity Inadequate
- AR01704388; Water On Floor Inside Unit 2 Façade 6.5 Level RCA
- AR01707781; Condenser Boot Misalignment Requires Different Design Boot
- AR01709700; Water Overflowing In TSC Area
- AR01724574; C-318 Is In Alarm
- AR01730209; Turkey Point Rapid OE: Cable Submergence
- AR01735168; Plug Elevator Pit Drains To Stop Backfill From Sumps
- AR01736556; C-317 Manhole #3 Is In Alarm
- AR01736686; Potential Trend Zurn Strainer Leaks
- AR01738214; Manhole #3 Sump: Z65C, C-317 Enclosure Alarm / Beeping Noise
- AR01738482; Alarm C-317C #4 Indicates Manhole 3 Needs Pumping
- AR01739382; Door 116 Water Slip Hazard
- AR01743132; C-317 Manhole Alarm Panel Alarming
- AR01743132; C-317 Manhole Alarm Panel Alarming
- AR01743645; Manhole #3 Alarming
- AR01745051; Manhole Alarm Connections Found Flooded And Grounded
- AR01747766; CWPH Flood Dampers On The East Wall Are Not Closed
- DBD-T-41; Hazards Internal And External Flooding (Module A); Revision 8
- Drawing 19144; Electrical Plot Plan; Revision 15

- Drawing PB20561; Drainage Plan For Electrical Manholes MH-066D, MH-067D, MH-068 & MH-21; ; Revision 02
- Drawing PB20593; Drainage Plan For Electrical Manholes MH-066A, 067A; MH-066B, 067B & 066C, 067C; Revision 03
- EC271806; Engineering Evaluation For Justifying Door Gap Size On Flood Doors; Completed March 31, 2011
- ER-AA-106; Cable Condition Monitoring Program; Revision 2
- FSAR Appendix A.7; Plant Internal Flooding; UFSAR 2010
- NP 7.7.28; Cable Condition Monitoring Program; Revision 3
- NP 8.4.11; Penetrating Barriers; Revision 19
- NP 8.4.17; PBNP Flooding Barrier Control; Revision 14
- NRC RIS 2001-09; Control Of Hazard Barriers; April 2, 2001
- PBN 11-016; Programs Engineering; Completed October 17, 2011
- PM40097161; Pump Electrical Manhole Sumps 6 Month PM
- POD For CRs 01641275 And 01641291; Manhole #1 And Manhole #2 Degraded Cable Supports; Revision 0
- Station Log; February 21, 2012AR01740907; Equipment Alarming
- WO Package 1382224; Cable Condition Monitoring
- WO00355031; Perform Inspection Of Manholes Z-066A, Z-067A, Z-068, 1 & 2
- WO40080735; Z-065A / Manhole #1 Degraded Cable Supports
- WO40080737; Z-065B / Manhole #2 Degraded Cable Supports

1R07 Heat Sink Performance

- 2-SOP-VNCC-001; 2W-1A1 Accident Fan Recirculation Unit Draining, Filling And Venting; Revision 1
- ACE1690475; NOS Finding Associated With GL 89-13; Revision 2
- AR01690475; NOS Finding GL 89-13 HX Performance Testing Issues
- AR01712999; Operability Concern: U2 CFC Accident Fan Cooler Drain Valves
- AR01723771; OI-130/131 Canceled: LR/GL 89-13 CFC Thermal Performance Test
- Calculation 2002-0003; Service Water System Design Basis; Revision 2
- MRC Causal Evaluation And CA Reviews Week Of January 30, 2012
- NPM 2011-0367; Internal Correspondence From P. Holzman, GL 89-13 Program Administrator; Subject: GL 89-13 & LR Heat Exchanger Commitments; December 7, 2011
- OI 155; Chemical Treatment Of Service Water For Mussels; Revision 34
- PM Program Report: Heat Exchanger General Tube Type; August 25, 2004
- POD For CR01618001; U1 CFCS Show A Declining Trend From Suspected Tube Plugging; Revision 6
- TS-34; Containment Accident Recirculation Fan-Cooler Units (Monthly) U-2;
- Completed December 13, 2011, January 12, 2012, And February 16, 2012

1R11 Licensed Operator Regualification Program

- AR01722128; Unit 2 EH-C Governor Valve Tracking Comparator
- AR01730692; LOR Notification Inaccuracy During "As Left" Scenario
- AR01733208; Simulator PPCS Results In Lost Simulator Availability
- AR01735049; Adverse Trend In Simulator Fidelity Affects Quality Training
- AR01735409; Unexpected Indication In Simulator Affect Evaluated Scenario
- Crew Simulator Examination Summary Crew E; January 12, 2012
- FSAR Section 10.0; Steam And Power Conversion; UFSAR 2010, 2009, and 1998

- NARS Forms; January 12, January 19, January 26, February 2, February 9, And February 16, 2012
- OP-AA-100-1000; Conduct Of Operations; Revision 4
- Open Simulator Work Orders; February 22, 2012
- SEG No. PBN LOC 12A 001E; LOC Cycle 12A As-Left; Revision 0
- Simulator Differences List for Cycle 12A
- TS-4; Main Turbine Stop And Gov Valves With Turbine Trip Test (Biannual) U-2; Completed January 9, 2012

1R12 Maintenance Rule Effectiveness

- AR01722333; VNDG-04178-M / Replace Broken Motor Operator
- AR01722855; 4160 Breaker Springs Did Not Discharge
- AR01742152; Rework On DA-212 Check Valve Replacement
- AR01750276; G-01 And G-02 Diesel Room Air Flow NRC Concern
- Auxiliary Operator Logs; March 11 and March 18, 2012
- B 3.8.1; AC Sources Operating; PB Bases June 1, 2009
- B 3.8.1; AC Sources Operating; Unit 1 Amendment No. 201 And Unit 2 Amendment No. 206
- Calculation No. 2005-0054; Control Building GOTHIC Temperature Calculation; Revision 01
- DBD-16; Emergency Diesel Generator System; Revision 17
- Maintenance Rule Performance Assessments For 4.16KV Since January 1, 2012; February 28, 2012
- OI 168; Emergency Diesel Generator Operability; Revision 10
- PBF-2032 TB1 Log; G-01 And G-02 Gravity Operated Louvers; Revision 97
- PBTP 157; G01/G02 Diesel Room Exhaust Fan Flow Measurement; Completed July 6, 2007
- Report From PdMA Corporation; MCE Testing On February 9, 2010 For 0W-012B-M, G-01 Room Exhaust Fan Motor
- TS 81; Emergency Diesel Generator G-01 Monthly; Revision 81
- WO Package 00360458; W-012B-M, MCE Analyze Motor (2B52-329H/2b-32), W/O RIC
- WO Package 00360459; W-012C-M, MCE Analyze Motor (2B52-328M/2b-32), W/O RIC
- 1R13 Maintenance Risk Assessments and Emergent Work Control
- AR01726927; SI Valve Testing Risk Management Review Not Properly Completed
- AR01729782; Oil Is Leaking From 2X-02 Reduce Nitrogen Gas Pressure (Including Functional Evaluation)
- AR01729812; Oil Leak at 2X-02 Transformers
- AR01731561; Protected Train Signs Posted During X-Work Week
- Daily Risk Assessment Units 1 And 2; January 30 And January 31, 2012
- Functionality Assessment (FA) For AR1729782; Oil Is Leaking From 2X-02 Reduce Nitrogen Gas Pressure
- NP 2.1.8; Guarded Equipment; Revision 16
- OP-AA-102-1003; Guarded Equipment; Revision 3
- PB Units 1 And 2, Daily Status Report; February 2, 2012
- Station Log; February 18 21, 2012
- Unit 1 And Unit 2 Daily Status Report; February 14, 2012
- Unit 1 And Unit 2 Risk Management Worksheets; February 11 16, 2012
- WM-AA-203; Online Scheduling Process; Revision 7

1R15 Operability Evaluations

- AR01711633; Fleet Recommendations For Minimizing Pzr Safety Leakage
- AR01718363; Re-Align 2RC-435 Discharge Piping To Eliminate Cold Spring
- AR01718806; Void Found During U1 Sentinel Point Monitoring
- AR01718854; Issues During U1 Containment Sentinel Monitoring
- AR01727847; Cable Information Incorrect For Breaker 52-T Line Side
- AR01727978; CALC 2003-0046 Rev. 004-C DC Loading Issues
- Calculation No. 2003-0046; Battery Chargers Sizing And Current Limit Set Point; December 7, 2010
- PB-WM-027; Completed WO Task Report For WO 40064384, SI System Multi And/Or Non-Numbered Equipment; January 6, 2012
- POD For CR01705935; Unit 2 MFIV Accumulator Pipe Spool Welds Undersized; Revision 1

1R18 Plant Modifications

- ASME Boiler And Pressure Vessel Code Section III; 1965
- ASME Boiler And Pressure Vessel Code Section VIII; 2004 And 2010
- Calculation No. 2011-0024; Piping Qualification For Relief Valve Addition To Unit 1 Safety Injection Accumulator Tank; Revision 0
- Drawing DS-C-69959-2; Nozzle Type Relief Valve; Revision A
- EC 274965; TMod For IT-34B, Safety Injection Accumulator, Alternate Relief Valve; December 15, 2011
- Performance Criteria Assessments For 4.16KV Since January 1, 2012
- R/R Activity No. 2011-0061; Equipment ID T-034B, Safety Injection, Unit 1
- SCR 2011-0338; TMod For Temporary Relief Valve On Unit 1 SI Accumulators, T-34B; December 16, 2011
- Spec 4.4.3; Westinghouse E-Spec 677051; May 22, 1970
- SQ-02663; SEWS ID: 2SI-832A; T-34A SI Accumulator LT-038 Upper/PT-940 ISOL; Revision 0

1R19 Post-Maintenance Testing

- ACE 01701572; While Restoring 1A-05 Following Maintenance, Synchronization Scope Identified As Operating Backwards
- ACE 1683509 / 1685732; Assignment 03; Revision 2; Completed November 11, 2011
- AR01683509; EC 258482 May Not Have Been Fully Implemented On The MFRV
- AR01683692; TS B 3.7.3 Incorrect
- AR01685732; Missed PMT On U2 MFRV Limit Switches
- AR01685944; Verify Proper Operation Of MFRV Limit Switches For AMSAC
- AR01686211; 1/4 Inch Weep Hole Not At Low Point Of 2CS-466D-S
- AR01686222; 1/4 Inch Weep Hole Not At Low Point Of 2CS-476D-S
- AR01686774; Solenoid Installation Not IAW EQMR Requirements
- AR01687269; Inadequate Screening For Installation Of MFIVs
- AR01688335; U2 EPU Issues Not Resolved For U1
- AR01701544; Sync Scope Spinning When Looking At Live To Dead Buss
- AR01701546; Synchroscope Rotated When Attempting To Energize A Dead Bus
- AR01701572; Wires Improperly Relocated In Cubicle 61 Of 1A-05
- AR01747160; P-32C Service Water Pump Failed To Start
- AR01747405; P-032C-CS Jumper Wires Not Installed Per Drawing
- Drawing 208863; Connection Diagram Local Devices Control Valves; Revision 09

- Drawing 257256; External Connection Dia. AMSAC (2N16); Revision 06
- Drawing 257259; AMSAC (2N16) Circuit Diagram; Revision 09
- Drawing 344515; Elementary Wiring Diagram Normal Pwr To 1B420C-B9570, P-32C SW Pump Xfr SW; Revision 04
- EC 12054; Feedwater Regulating Valves Upgrade Unit 2
- Email From G. Siegfried, To R. Fish And M. Moran; Subject: AR 01683509 / EC 0271631 Actions – MFRV Design Restoration; September 5, 2012
- EN-AA-201-1000; Engineering Change Request (NAMS); Revision 0
- Functionality Assessment For AR01685732, Assignment 01; Completed September 16, 2011
- Log Entries Report; May 6 To June 26, 2011
- NP 10.2.7; Post-Maintenance/Return To Service Testing; Revision 9
- Response to NRC Questions From September 7, 2011 Regarding EC 258482
- RMP 9043-16; Emergency Diesel Mini-Power Pack Inspection; Completed February 13, 2012
- RMP 9043-27A; Emergency Diesel Generator G-02 Post-Maintenance Run And Testing; Completed February 13, 2012
- RMP 9141; Air-Operated Valve Testing And Adjustment; Completed June 22, 2011
- Station Log; March 21 To March 23, 2012
- Temporary change Request For RMP 9043-23, Emergency Diesel Generator G-02 Mechanical Inspection; Completed February 17, 2012
- WO Package 00386512; 2CS-00466, EC 12054 Feed Reg Valves (MFRV) Upgrade
- WO Package 00386783 01; 1A00-61 / 1A05 Bus PT Fuse Wires Landed
- WO Package 00387309; 2CS-00476, EC 12054 Feed Reg Valves (MFRV) Upgrade
- WO Package 00396964; P-032C-CS / Replace Control Switch For P-32C
- WO Package 40109703; Group F Mechanical Maintenance Items Inspection And Maintenance
- WO Package 40118781 01; Sync Scope Spinning When Looking At Live To Dead Buss

1R22 Surveillance Testing

- 1.1 Definitions; Unit 1 Amendment No. 240, Unit 2 Amendment No. 244
- 2-TS-ECCS-002; Safeguards System Venting (Monthly) Unit 2; Completed January 31, 2012
- 3.4.13; RCS Operational Leakage; Unit 1 Amendment No. 223; Unit 2 Amendment No 229
- 3.5.2; ECCS Operating; Unit 1 Amendment No. 209; Unit 2 Amendment No. 214
- ACE 01716135; Since January 2011, 53 CRs Identifying Issues In the Scaffold Program; Revision 1
- AR01687462; Scaffolding Built Too Close To Unit 1 A MSIV
- AR01689915; Scaffold On 85' Unit 2 Façade By "B" MSIV
- AR01716135; 2SI-871A Operation Blocked By Scaffolding
- AR01716243; Indications Of Flashing During Performance Of IT 8A
- AR01718806; Void Found During U1 Sentinel Point Monitoring
- AR01718854; Issues During U1 Containment Sentinel Monitoring
- AR01719503; Unit 1 Increased Frequency LHSI UT Monitoring Required
- AR01721481; Work Task Not In Schedule On Day Of Execution
- AR01721719; Frequent Sump A Draining On Unit 1
- AR01722128; Unit 2 EH-C Governor Valve Tracking Comparator
- AR01724377; Low Out Of Specification D-105/106 Battery Cell Temperatures
- AR01727024; PMT Task Missed During Work Week 1103
- AR01732581; P-32C Service Water Pump Enters Alert
- AR01735596; Hot Leg Sample Line Has Seam Leak In U1 Sample Room
- AR01735611; RCS Leak At Union Prior To 1SC-956C
- AR01741871; U1 C.O. Logs Required Confirmatory RCS Leakage Action Level 2
- AR01743304; Unit 1 Meets RCS Leak Rate Action Level 1 Conditions

- AR01743490; Unit 1 In Action Level 2 For RCS Leakage
- B 3.4.13; RCS Operational Leakage; Unit 1 Amendment No. 201; Unit 2 Amendment No 206
- B 3.5.2; ECCS Operating; Unit 1 Amendment No. 201; Unit 2 Amendment No. 206
- CE 01716243-01; During Performance Of IT-08A On 12/15/11, Indication of Flashing In Steam Supply Line To 1P-29; December 28, 2011
- CE 0172978-01; Calc 2003-0046 Rev. 004-C DC Loading Issues; February 14, 2012
- CL 1E; Containment Closure Checklist Unit 1; Revision 21
- Condition Evaluation For AR1721719; Performed January 25, 2012
- Control Room Shift Logs Modes 1-3, Unit 1; March 10, March 12, And March 13, 2012
- FSAR Section 1.3; General Design Criteria; UFSAR 2010
- FSAR Section 10.0; Steam And Power Conversion; UFSAR 2010, 2009, and 1998
- FSAR Section 4.1; Reactor Coolant System Design Basis; UFSAR 2008
- FSAR Section 5.1; Containment System Structure; UFSAR 2007, 2008, 2009, And 2010
- FSAR Section 6.5; Leakage Detection Systems; UFSAR 2008
- IT 06 Train A; Train A Containment Spray Pumps And Valves Unit 2; Completed December 14, 2011
- IT 07C; P-32C Service Water Pump (Quarterly); Completed February 8, 2012
- IT 07D; P-32D Service Water Pump (Quarterly); Completed February 15, 2012
- JPM P000.038AOT; Locally Shut MSIVs
- Log Entries Report; December 22, 2011 To February 9, 2012
- MI 32.9; Scaffolding Program; Revisions 32, 33, And 34
- MRF'F 01687462-01; Scaffold Number 1863, For Work Order 40092074, Was Built Too Close To 1MS-2018, HX-1A Header Main Steam Stop; November 27, 2011
- NP 2.1.2; Independent Verification And Concurrent Verification; Revision 13
- NP 8.4.8; Requirements For Scaffold Near Safety Related Equipment; Revisions 15 And 16
- OI 55; Primary Leak Rate Calculation Unit 1; Completed March 10, March 12, And March 13, 2012
- OM 4.3.8; Control Of Time Critical Operator Actions; Revision 0
- ORT 12; Fuel Transfer Tube Flange Seal Unit 1; Revision 13
- ORT 12; Fuel Transfer Tube Flange Seal Unit 2; Revision 11
- ORT 79; Mechanical Penetration Leak Test Unit 1; Revision 8
- PBNP FSAR (07/07); Containment Isolation System
- PBTP 247; Cold Start Of Turbine-Driven Auxiliary Feed Pump And Governor Compensation Adjustment Unit 1; Completed February 13, 2012
- PB-WM-027; Completed WO Task Report For WO 40064384, SI System Multi And/Or Non-Numbered Equipment; January 6, 2012
- TAR01716135; 2SI-871A Operation Blocked By Scaffold; Revision 1
- TS-4; Main Turbine Stop And Gov Valves With Turbine Trip Test (Biannual) U-2; Completed January 9, 2012
- U2R32 Appendix J Testing Schedule; July 22, 2011
- WM-AA-1000; Work Activity Risk Management; Revision 11
- WO 40095711; ORT 12, Fuel XFR Tube Flange Seal
- WO Package 40040086; D-106, Quarterly Station Battery Inspection
- WO Package 40090271; D-105, Quarterly Station Battery Inspection
- WO Package 40103250; 125V, Station Tech Spec Batteries Weekly Inspection
- WO Package 40106646 01; 2ICP-2.31 2P-53 AF Suction Header Pressure Trip; February 13, 2012
- WO Package 40127791; 1P-29-T / Speed Oscillations Observed On Recirculation Flow
- WO Task 40088142 08; HX-001A Ops PMT/RTSz

- WO Work Plan 371399-33; G05, New Instrument Calibrations (EC-13806) NAMS EC 260234; Completed August 14, 2011
- WOG STS; B 3.6 Containment Systems; Revision 3.0, March 31, 2004

1EP6 Emergency Preparedness

- AR01747747; PREX12 CR ERF Communicator Issues
- AR01748061; PREX12 Issues Identified In The JPIC Critique Post Pre-Ex
- AR01748699; PREX12 PAR DEP Failure
- EPIP 1.1; Course Of Actions; Revision 62
- EPIP 1.2; Emergency Classification; Revision 50
- EPIP 2.1; Notifications ERO, State And Counties, And NRC; Revision 45
- List of Emergency Preparedness Corrective Action Documents; January 1 To March 27, 2012
- NARS Form; Completed March 6, 2012

4OA1 Performance Indicator Verification

- NEI 99-02; Regulatory Assessment Performance Indicator Guideline; Revision 6; October 2009
- Point Beach 1 And 2; 4Q/2011 Performance Indicators For Unplanned Scrams
- Point Beach 1 And 2; 4Q/2011 Performance Indicators For Unplanned Power Changes
- Point Beach PI Reporting Data; 1Q11 Through 4Q11 For Unplanned Power Changes
- Point Beach PI Reporting Data; 1Q11 Through 4Q11 For Unplanned Scrams
- 4OA2 Identification and Resolution of Problems
- AOP-9A; Service Water System Malfunction; Revision 27
- AR01691680; SBCC/EOP Entrance Door Requires Repair/Re-Installation
- AR01693038; Door 140 Was Found Unlatched
- AR01693044; Security Identified Door 265 Unsecured
- AR01694249; Door Is Failing (Structural Frame Of Door Breaking)
- AR01694307; Door 40 Found Open
- AR01694442; Fire Door 217
- AR01694725; Security Door 134 Not Functioning As Designed
- AR01696696; Door 338 Closure Broken
- AR01696713; Door 179, Handle Is Sticking/Hung Up
- AR01696811; Door 265 Not Functioning As Designed
- AR01697537; Non Security, Fire Door-250
- AR01698266; Door 336 Mag Switches Not In Alignment
- AR01698315; Status Level Alarm On Guidant Employee
- AR01698693; Numerous Timeout Alarms On Door 206
- AR01698792; Status Alarm On Door 265
- AR01698859; Workers Not Performing A Proper Door Check
- AR01699096; Radiation Control Measure Lapse
- AR01699230; Status Alarm At Door 70
- AR01699245; Door 205 Handle Latch Needs Alignment
- AR01699644; Security Identified Door # 321 Unsecured
- AR01700129; Door 311 Needs Replacement
- AR01701432; Door 272 Out Of Alignment
- AR01701615; Door 112 OOS Need Full Replacement
- AR01702385; Fingers Sticking On Fire Door 139
- AR01702621; Mag Switch On Door 272

- AR01702763; Door 11 Needs To Be Replaced
- AR01703704; Security Door 321 Handle Does Not Lock
- AR01703893; Door 272 Found Unsecure
- AR01703912; Door-139 Likely To Be OOS For More Than 7 Days
- AR01703998; Door Repair
- AR01704594; Door 2 Broken
- AR01704664; Door 272 Receiving Multiple Time Outs
- AR01704667; Fire Door 208 Finger Plate Loose
- AR01704757; Equipment Blocking Door For Response
- AR01705043; Door 114 Does Not Secure At All
- AR01705805; Door 232 Secondary Do Not Functioning As Designed
- AR01706975; Door 289 (SSB To TB1 44') Strike Plate Is Loose
- AR01707172; Door 602 Is Not Closing Properly
- AR01708298; Shaft To Door Handle Broke On Door 152
- AR01708495; Security Identified Door # 272 Unsecured
- AR01708614; Upper Door Latch Broke
- AR01708764; Openings Doors 8 And 9 In Air Compressor Room
- AR01711301; Timeliness Of Trend Codes
- AR01712406; Automatic Door Closure Not Functioning
- AR01713101; Door Knob Is Broken To Switchhouse
- AR01713288; Door Removed From Service Due To Mechanical Conditions
- AR01713382; Security Identified Door # 27 Unsecured
- AR01713727; Numerous Tamper Alarms Received On Door 205
- AR01714713; Switchyard Switch House Door Knob Broken
- AR01715513; Security Identified Door # 321 Unsecured
- AR01715604; Door Handle Broken East Switchyard Building
- AR01715740; Security Identified Door # 321 Unsecured
- AR01715766; Door-149, Door Closing Device Required Adjustment
- AR01715789; Door 9 Not Functioning As Designed
- AR01717062; Hard Alarm On Door 205
- AR01717267; Fire Door 309 Handle About To Fall Off
- AR01717313; Door 345 Handle Assembly Loose
- AR01717357; Door 159 Alarm Will Not Reset
- AR01718962; Manual Blowdown Flow Entry Into PPCS Affects RTO Indication
- AR01719678; Potential Trend Scaffold Issues
- AR01720581; Control Room Door-61 Lower Sweep Is Peeling Away
- AR01720873; Door 716 In Need Of Repair
- AR01722073; Potential Trend At Risk WOs Being Held In Work Week
- AR01722697; Potential Trend Tagging OBD/OBN Conditions
- AR01722922; Door 250 Was Not Closed
- AR01723134; G05 Northeast Personnel Door Deficiency
- AR01723184; Door 311 Creating Numerous Tamper Alarms
- AR01723960; Door 105B (Fire Door) Doesn't Automatically Close
- AR01724284; Data Gathering For Unit 1 TAVG Oscillations
- AR01725062; WW# 1202 WO# 40099310 W-036A
- AR01725391; North CR Door's Seal Is Missing Bottom Two Screws
- AR01725960; Potential Station Trend In Effective Placekeeping
- AR01725966; Potential Trent In Chemistry Equipment Failures
- AR01725989; Door Handle Coming Apart To Security Hut
- AR01726339; Calcium In Bast And Both Units' RCS
- AR01726688; Door-105B Requires Manual Force To Pull/Push It Shut

- AR01727266; Trend Alarm Received On PPCS
- AR01727504; NSB Chemistry Office Breakers Tripped Due To Capacitor Bank
- AR01727952; Chemistry Dionex Performance Deficiency Potential Trend
- AR01728420; Security Hut 4
- AR01728506; Door-716 Needs Replacement
- AR01728558; P-110A,B, Late Identification Of Parts
- AR01728707; RP Ser: Evaluate For Potential Trends
- AR01729452; Negative Trend In Procedure Use And Adherence For Crew E
- AR01729673; Work Week # 1207 Late Material ADD
- AR01729723; Loose Door Molding Protruding Into Walkway
- AR01729878; Door-250 From RP Checkpoint To U1 TH Does Not Shut
- AR01730050; WW # 1205 Late Material ADD
- AR01730146; Adverse Trend Station Housekeeping
- AR01730437; CAP Health Index KPI Decline
- AR01730688; Security Equipment Not Working As Designed
- AR01731398; Received Unexpected Alarm: White/Yellow Bus Ventilation Trouble
- AR01731404; Door 310 Not Functioning As Designed
- AR01731734; W-86 Brining In Ventilation Trouble Alarms
- AR01731783; Temperature Issues With MFIVs & Support Systems
- AR01732965; Equipment Reliability Program Requirements Implementation
- AR01732994; Potential Trend Valve Handwheels
- AR01733006; Declining Maintenance Standards And Practices
- AR01733190; F-143 Handle Missing On Filter Door
- AR01733397; Door Handle Not Operating Correctly
- AR01733533; Door 29 Handle / Bolt Sticking
- AR01733748; Loose Handle Security Hut 04
- AR01734350; Door 345 Maglock In Need Of Adjustment Or Replacement
- AR01734580; Door Does Not Secure With Handle
- AR01734595; Security Door Not Functioning As Designed
- AR01734615; DGB Door 102 Not Securing Properly
- AR01734875; Door-716 NSB North Entrance
- AR01734879; Door 321 Sticking Open
- AR01735415; Lockset Broken
- AR01735777; Security Identified Door #003 Unsecured
- AR01736062; Potential Trend Plant Door Deficiencies
- AR01736799; Security Related Door Found Open
- AR01736812; Security Door Not Functioning As Designed
- AR01737707; Fingers Sticking Door 107
- AR01737972; Level 1 Escalation For Operations Fundamentals
- AR01739210; Security Open Door
- AR01739601; Security Door 344 Difficult To Operate
- AR01740313; Caps Not Timely Trend Coded
- AR01740391; Potential Trend App. R Handwheel Incorrectly Painted
- AR01741334; Door 006 Secondary Door Pull Chain Latch Release Broken
- AR01741416; Equipment Blocking Emergency Exit Door
- AR01741948; NSB Door-301A
- AR01742647; PBNP Human Performance Health Index
- AR01742693; Obstructed Door Unit 2 44' Level Non-Nuc Room
- AR01743087; Fingers Sticking In Door DGB 107
- AR01743493; Exit Reader On Door 345 Not Functioning As Designed
- AR01744459; DGB Door 102 Will Not Unlock From Outside

- AR01745390; Door 25 Not Closing Properly
- AR01746890; Security Related Door
- AR01746948; Closure Needs To Be Adjusted On Fire Door 8
- AR01746969; Security Door Enhancement
- AR01748997; Weather Stripping Coming Off Bottom Of Fire Door 74
- EN-AA-203-1001; Operability Determinations / Functionality Assessments; Revision 6
- Evaluation Of Potentially Exceeding Licensed Thermal Power Due To Steam Generator Blowdown Flow Decreasing; Prepared By Steven Barkhahn; March 13, 2012
- NEI Position Statement; Guidance To Licensees On Complying With The Licensed Power Limit; June 12, 2008
- NP 8.4.16; PBNP High Energy Line Break Barriers/Vent Paths; Revision 18
- NP 8.4.17; PBNP Flooding Barrier Control; Revision 14
- NRC RIS 2007-21, Rev. 1, Adherence To Licensed Power Limits; February 9, 2009
- OM 3.27; Control Of Fire Protection & Appendix R Safe Shutdown Equipment; Revision 44
- PI-AA-204; Condition Identification And Screening Process; Revision 16
- PI-AA-205; Condition Identification And Corrective Action; Revision 15
- Station Log; February 6, 2012
- TAC No. MD9233; Safety Evaluation Regarding Endorsement Of NEI Guidance For Adhering To The Licensed Power Limit

LIST OF ACRONYMS USED

AC ACE	Alternating Current Apparent Cause Evaluation
ADAMS	Agencywide Document Access Management System
ALARA	As-Low-As-Is-Reasonably-Achievable
AMSAC	Anticipated Transient Without Scram Mitigation System Actuation Circuitry
AOP	Abnormal Operating Procedure
ASME	American Society of Mechanical Engineers
CAP	Corrective Action Program
CCW CFCU	Component Cooling Water Containment Fan Coil Unit
CFCU	Code of Federal Regulations
CIV	Containment Isolation Valve
CR	Condition Report
DRP	Division of Reactor Projects
EC	Engineering Change
ECCS	Emergency Core Cooling System
ED	Electronic Dosimeter
EDG	Emergency Diesel Generator
EP	Emergency Preparedness
EPU	Extended Power Uprate
FP	Fire Protection
FSAR	Final Safety Analysis Report
FW	Feedwater
HELB	High-Energy Line Break
HEPA	High-Efficiency Particulate Air
IMC	Inspection Manual Chapter
INPO	Institute of Nuclear Power Operations
IP	Inspection Procedure
IR	Inspection Report
IST	Inservice Testing
LCO	Limiting Condition for Operation
LLC MFRV	Limited Liability Corporation Main Feedwater Regulating Valve
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NP	Nuclear Plant Procedure
NRC	U.S. Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation
PARS	Publicly Available Records System
PI	Performance Indicator
PMT	Post-Maintenance Testing
RCS	Reactor Coolant System
RHR	Residual Heat Removal
RP	Radiation Protection
SDP	Significance Determination Process
SM	Shift Manager
SR	Safety-Related
SRO	Senior Reactor Operator
SSC	Structure, System, and Component

SW	Service Water
TEDE	Total Effective Dose Equivalent
TLD	Thermoluminescent Dosimeter
TS	Technical Specification
TSC	Technical Support Center
URI	Unresolved Item
WO	Work Order

L. Meyer

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Sincerely,

/RA/

Michael A. Kunowski, Branch Chief Branch 5 Division of Reactor Projects

Docket Nos. 05000266; 05000301 License Nos. DPR-24; DPR-27

Enclosure: Inspection Report 05000266/2012002 and 05000301/2012002 w/Attachment: Supplemental Information

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Letter to L. Meyer from M. Kunowski dated May 11, 2012

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 – NRC INTEGRATED INSPECTION REPORT 05000266/2012002 AND 05000301/2012002

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